

2016 AQI QCDR Measure Specifications

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Anesthesia Quality Institute

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INTRODUCTION TO 2016 SPECIFICATIONS

Thank you for your interest in reporting quality measures for the Physician Quality Reporting System (PQRS) via the ASA Qualified Clinical Data Registry (ASA QCDR). This booklet includes measure specifications for the non-PQRS measures contained in the ASA QCDR.

The requirements for satisfactorily participating in a QCDR include:

INDIVIDUAL REPORTING OPTION via ASA QCDR

Of the measures available via the ASA QCDR, report at least 9 measures covering at least 3 of the NQS domains, AND report each measure for at least 50 percent of the EP's patients. Of these measures, the EP would report on at least 2 outcome measures, OR, if 2 outcomes measures are not available, report on at least 1 outcome measures and at least 1 of the following types of measures – resource use, patient experience of care, efficiency/appropriate use, or patient safety.¹

Eligible professionals (EPs) reporting at the individual level are assessed on an individual basis. Although they may be part of a group practice, their PQRS assessment is based upon their individual performance.

Note: ASA QCDR has not applied for Group Practice Reporting Option (GPRO) status for the Qualified Clinical Data Registry. Practices who seek to report via the GPRO function should contact a different QCDR.

For PQRS reporting, **there are no hardship or low-volume exemptions.** All EPs who furnish covered professional services must participate in the PQRS program each year by meeting the criteria for satisfactory reporting – for example, satisfactory participation in a QCDR, in order to avoid the PQRS payment adjustment.

Individual EPs and practices are responsible for identifying a sufficient number of measures via the QCDR to report throughout the year. This policy is consistent with other reporting mechanism as well. For the QCDR reporting option, you may use any combination of official PQRS measures and non-PQRS QCDR measures available through the ASA QCDR reporting mechanism. For available PQRS measures, please consult the AQI website.

As required by regulation, practices will have access to their performance reports at least four times a year. It is the responsibility of the individual EPs and/or practices to ensure that AQI is receiving all required data. Any adjustments to collecting such data remain under the purview and responsibility of the individual EP and the practice. If you have trouble accessing the reports or have questions on how to read the reports, please contact AQI at askaqi@asahq.org.

Measure specifications are reviewed and updated on a yearly basis. It is the responsibility of the individual EP and/or the practice to make appropriate modifications to their data capture and reporting systems - on an annual basis. Each year, ASA physician leaders, committees and staff review the measures for applicability to the practice of anesthesiology, determine the feasibility of reporting such measures and take into consideration measure feedback received throughout the year. Practices and individual EPs are invited to attend virtual office hours for announcements and clarification on measures. Each year, CMS reviews the measures and may accept or reject measure based upon their assessment. Measure specifications as posted in this book are final for the year 2016 and cannot be amended or changed by the practice for reporting purposes. If the practice cannot gather and

¹ The AQI offers more than two outcome measures to report. Therefore, EPs must report at least two outcome measures.

submit *all* the specified denominator or quality-data codes in the numerator, the practice may not report that measure. Questions related to reporting individual measures should be sent to qra@asahq.org.

Note that the measure specifications include two different measure numbers – an “ASA XX” measure number and an “AQI XX” measure number. The ASA number has been used for several years in the ASA QCDR. The “AQI XX” number has been assigned by CMS. Gaps in numbering may reflect measures that have been removed from the ASA QCDR.

PQRS measures that have been retired from the official PQRS measure list, such as Timely Administration of Prophylactic Antibiotics (formerly PQRS #30) and the Perioperative Temperature Management process measure (PQRS #193) are not available for reporting via the ASA QCDR.

DISCLAIMER

Participation in the ASA® Quality Service does not guarantee satisfactory participation in the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting System (PQRS) program. Successful submission to CMS is contingent upon each individual eligible provider (EP) and/or practice meeting the PQRS program requirements and the timeliness, quality, and accuracy of the data they provide for reporting.

The information provided is not to be construed as practice management or legal advice. Every reasonable effort has been made to ensure the accuracy of the information presented at the time of posting, but AQI and ASA do not warrant or guarantee that the information presented is exhaustive or error-free. AQI and ASA further disclaim all liability for loss or damage incurred by third parties arising from the use of the information. Please consult your legal advisor or other qualified professional for guidance and information specific to your situation.

MEASURES REMOVED FROM NON-PQRS ASA QCDR MEASURE SET

Please note that several previously used ASA QCDR measures have been placed in the official PQRS measure set. ASA has included these measures in the official PQRS measures available for reporting via the QCDR mechanism. Individual EPs and practices may choose to report any combination of PQRS and non-PQRS QCDR measures available through the ASA QCDR.

2015 Measure Number	Measure Description	Reason for Not Including in 2016 Specifications
ASA #6	Post-Anesthetic Transfer of Care: Use of Checklist or Protocol for Direct Transfer of Care from Procedure Room to Intensive Care Unit (ICU)	<p>Measure has been adopted into official PQRS list.</p> <p>Measure is available for reporting via the ASA QCDR and ASA Qualified Registry mechanism.</p> <p>New measure is now identified as PQRS #427.</p>
ASA #7	Prevention of Post-Operative Nausea and Vomiting (PONV)	<p>Measure has been adopted into official PQRS list.</p> <p>Measure is available for reporting via the ASA QCDR and ASA Qualified Registry mechanism.</p> <p>New measure is now identified as PQRS #430.</p>
ASA #9	Anesthesiology: Post-Anesthetic Transfer of Care Measure: Procedure Room to a Post Anesthesia Care Unit	<p>Measure has been adopted into official PQRS list.</p> <p>Measure is available for reporting via the ASA QCDR and ASA Qualified Registry mechanism.</p> <p>New measure is now identified as PQRS #426.</p>
ASA #17 / PQRS #30	Perioperative Care: Timely Administration of Prophylactic Parenteral Antibiotics	<p>Measure has been retired from official PQRS list.</p>
ASA #18	<p>Perioperative Temperature Management</p> <p>NOTE: For 2016, CMS has identified this measure as a <u>process</u> measure.</p>	<p>Measure has been adopted into official PQRS list.</p> <p>Measure is available for reporting via the ASA QCDR and ASA Qualified Registry mechanism.</p> <p>New measure is now identified as PQRS #424.</p>

2015 Measure Number	Measure Description	Reason for Not Including in 2016 Specifications
ASA #19	Perioperative Use of Aspirin for Patients with Drug-Eluting Coronary Artery Stents	<ul style="list-style-type: none"> • Denominator Criteria Updated (Removed CPT Codes 00326, 00561, 00834, 00836) • Denominator Criteria Updated (Added CPT Codes 01953, 01967) • Denominator Exclusion Added
ASA #21	Smoking Abstinence	<p>Measure has been adopted into official PQRS list.</p> <p>Measure is available for reporting via the ASA QCDR and ASA Qualified Registry mechanism.</p> <p>New measure is now identified as PQRS #404.</p>
ASA #22	Corneal Injury Diagnosed in the Post-Anesthesia Care Unit/Recovery Area after Anesthesia Care (Inverse Measure)	<p>Measure was changed from an inverse measure to a traditional/positive performance measure.</p> <p>New measure is now identified as ASA #38.</p>
ASA #33	Unplanned Hospital Readmission within 30 days of Principal Procedure	Measure was removed for feasibility issues.
ASA #34	Surgical Site Infection	Measure was removed for feasibility issues.
ASA #35	Day of Surgery Cancellation – Adult	Measure was removed for feasibility issues.
ASA #36	Day of Surgery Cancellation - Pediatrics	Measure was removed for feasibility issues.

MODIFICATIONS TO EXISTING NON-PQRS ASA QCDR MEASURES

The table below identifies changes that were made to the ASA non-PQRS QCDR measures available in 2015 in preparation for 2016. This table only serves as general reference in support of but not superseding the final measure specifications for each measure within the booklet.

2015 Measure Number	Measure Title	Modifications
ASA #8	Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)	<ul style="list-style-type: none"> • Denominator Exclusion Added • Denominator Criteria Updated (Removed CPT Codes 00326, 00561, 00834, 00836)
ASA #10	Composite Anesthesia Safety	<ul style="list-style-type: none"> • Measure Description Updated • Denominator Exclusion Added • Denominator Criteria Updated (Added CPT Codes 01953, 01967)
ASA #11	Perioperative Cardiac Arrest	<ul style="list-style-type: none"> • Updated Measure Title • Measure Description Updated • Denominator Updated • Denominator Criteria Updated (Removed CPT Codes 00530, 00534, 01990, 01999) • Denominator Criteria Updated (Added CPT Codes 01953, 01967, 01968, 01969) • Measure Type Updated
ASA #12	Perioperative Mortality Rate	<ul style="list-style-type: none"> • Updated Measure Title • Measure Description Updated • Measure Type Updated • Denominator Updated • Denominator Criteria Updated (Removed CPT Codes 01999) • Denominator Criteria Updated (Added CPT Codes 01953, 01967, 01968, 01969) • Numerator Updated • Measure Type Updated • Rationale Updated
ASA #13	Postanesthesia Care Unit (PACU) Re-Intubation Rate	<ul style="list-style-type: none"> • Denominator Definition Added • Denominator Exclusion Added • Denominator Criteria Updated (Removed CPT Codes 01967, 01990, 01999, ASA13F) • Denominator Criteria Updated (Added ASA13H, ASA13J)
ASA #14	Assessment of Acute Postoperative Pain	<ul style="list-style-type: none"> • Measure Title Updated • Measure Description Updated

2015 Measure Number	Measure Title	Modifications
		<ul style="list-style-type: none"> • Measure Type Updated • Denominator Criteria Updated (Removed CPT Codes 00326, 00561, 00834, 00836, 01990, 01999, Registry Code ASA14G) • Denominator Criteria Updated (Added 01953, 01967, 01968, 01969, Registry Code ASA14H) • Denominator Exclusion Added • Patient Performance Exclusion Deleted • Numerator Updated
ASA #15	Composite Procedural Safety for Central Line Placement	<ul style="list-style-type: none"> • Measure Description Updated • Denominator Definition Added • Denominator Exclusion Added • Denominator Criteria Updated (Removed CPT Codes 75901, 75902) • Performance Exclusion Deleted • Rationale Updated
ASA #16	Composite Patient Experience	<ul style="list-style-type: none"> • Denominator Criteria Updated (Removed CPT Codes 00326, 00561, 00834, 00836, 01990, 01999) • Denominator Criteria Updated (Added CPT Codes 01953, 01967, 01968, 01969) • Denominator Exclusion Added • Performance Not Met Updated • Rationale Updated
ASA #20	Surgical Safety Checklist – Applicable Safety Checks Completed Before Induction of Anesthesia	<ul style="list-style-type: none"> • Measure Description Updated • Denominator Exclusion Added • Denominator Criteria Updated (Added Registry Code ASA20A, CPT Codes 01953)
ASA #23	Coronary Artery Bypass Graft (CABG): Prolonged Intubation	No changes
ASA #24	Coronary Artery Bypass Graft (CABG): Stroke	Denominator Criteria Updated
ASA #25	Coronary Artery Bypass Graft (CABG): Post-Operative Renal Failure	Denominator Criteria Updated

2015 Measure Number	Measure Title	Modifications
ASA #28	Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Stenting (CAS)	Measure Description Updated
ASA #29	Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Endarterectomy (CEA)	Measure Description Updated
ASA #30	Rate of Endovascular aneurysm repair (EVAR) of small or moderate non-ruptured abdominal aortic aneurysms (AAA) who die while in the hospital	Measure Description Updated
ASA #31	Total Knee Replacement: Venous thromboembolic and Cardiovascular Risk Evaluation	<ul style="list-style-type: none"> • Denominator Criteria Updated • Measure Type Updated
ASA #32	Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet	Denominator Criteria Updated
ASA #38	New Corneal Injury Not Diagnosed in the Postanesthesia Care Unit/Recovery Area after Anesthesia Care	New Measure for 2016 – previous measure was an inverse measure

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DEFINITIONS²

Continuous Score: A measure score in which each individual value for the measure can fall anywhere along a continuous scale, and can be aggregated using a variety of methods such as the calculation of a mean or median (for example, mean number of minutes between presentation of chest pain to the time of administration of thrombolytics). NOTE: The ASA QCDR does not include any continuous score measures for 2016.

CPT Category II Codes: CPT Category II or CPT II codes, developed through the CPT Editorial Panel for use in performance measurement, encode the clinical action(s) described in a measure's numerator. CPT II codes consist of five alphanumeric characters in a string ending with the letter "F." CPT II codes are not modified or updated during the reporting period and remain valid for the entire program year as published in the measure specifications manuals and related documents for PQRS.

CPT II Modifiers: CPT II modifiers are unique to CPT II codes and may be used to report measures by appending the appropriate modifier to a CPT II code as specified for a given measure. The modifiers for a code cannot be combined and their use is guided by the measure's coding instructions, which are included in the numerator coding section of the measure specifications. Use of the modifiers is unique to CPT II codes and may not be used with other types of CPT codes. Only CPT II modifiers may be appended to CPT II codes. Descriptions of each modifier are provided below to help identify circumstances when the use of a modifier may be appropriate. Note that reporting an exclusion or reporting modifier will alter an EP's performance rate. Accurate reporting on all selected measures will count toward the reporting requirements, whether the clinical action is reported as complete or not complete (or performance met or not met).

- CPT II code modifiers fall into two categories; exclusion modifiers and the 8P reporting modifier. Exclusion modifiers may be appended to a CPT II code to indicate that an action specified in the measure was not provided due to medical, patient, or system reason(s) documented in the medical record. These modifiers serve as denominator exclusions for the purpose of measuring performance. Not all exclusions will apply to every measure, and some measures do not allow any performance exclusions.

Denominator (Eligible Cases): The lower part of a fraction used to calculate a rate, proportion, or ratio. It can be the same as the initial population or a subset of the initial population to further constrain the population for the purpose of the measure.

Denominator exception: Those conditions that should remove a patient, procedure, or unit of measurement from the denominator of the performance rate only if the numerator criteria are not met. Denominator exceptions allow for adjustment of the calculated score for those providers with higher risk populations. Denominator exceptions are used only in proportion measures. Denominator exceptions allow for the exercise of clinical judgment and should be specifically defined where capturing the information in a structured manner fits the clinical workflow. These cases are removed from the denominator; however the number of patients with valid exceptions may still be reported. Exceptions allow for the exercise of clinical judgment. Allowable reasons fall into three general categories:

- Medical reasons
- Patient reasons
- System reasons

² ASA and AQI have gathered these definitions from a number of sources including, but not limited to, CMS PQRS Implementation Guide, [CMS Measure Blueprint](#) and other official CMS documents, the [National Quality Forum Phrase Book](#), ASA reference documents and other materials. For specific references, please contact the ASA Department of Quality and Regulatory Affairs (QRA) at qra@asahq.org.

Denominator Exclusion: Patients who should be removed from the measure population and denominator before determining if numerator criteria are met. Denominator exclusions are used in proportion and ratio measures to help narrow the denominator. (For example, patients with bilateral lower extremity amputations would be listed as a denominator exclusion for a measure requiring foot exams.)

Denominator statement: A statement that describes the population evaluated by the performance measure.

eCQM: Electronic clinical quality measures (eCQMs) are standardized performance measures derived solely for use in EHRs. NOTE: The ASA QCDR does not include any eCQMs for 2016.

Eligible Professionals (EPs): Healthcare professionals who are providing services which get paid under or are based on the Medicare Physician Fee Schedule.

G-codes for PQRS: A set of Centers for Medicare & Medicaid Services (CMS)-defined temporary Healthcare Common Procedure Coding System (HCPCS codes) used to report quality measures on a claim. G-codes are maintained by CMS.

Initial (patient) population: Refers to all events to be evaluated by a specific performance eMeasure involving patients who share a common set of specified characteristics within a specific measurement set to which a given measure belongs. All patients counted (for example, as numerator, as denominator) are drawn from the initial population.

Intermediate Outcome Measure: An intermediate outcome measure assesses a factor or short-term result that contributes to an ultimate outcome.

Inverse Measure: An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For this measure, a lower performance rate indicates a higher quality of clinical care.

NACOR (National Anesthesia Clinical Outcomes Registry): A data warehouse that has been designated as a Qualified Clinical Data Registry (QCDR) by the Centers for Medicare and Medicaid Services (CMS) for Physician Quality Reporting System (PQRS) reporting.

National Quality Strategy (NQS): The National Quality Strategy was first published in March 2011 as the [National Strategy for Quality Improvement in Health Care](#), and is led by the Agency for Healthcare Research and Quality on behalf of the U.S. Department of Health and Human Services (HHS).

Mandated by the Patient Protection and Affordable Care Act, the National Quality Strategy was developed through a transparent and collaborative process with input from a range of stakeholders. More than 300 groups, organizations, and individuals, representing all sectors of the health care industry and the general public, provided comments. Based on this input, the National Quality Strategy established a set of **three overarching aims** that builds on the Institute for Healthcare Improvement's Triple Aim[®], supported by **six priorities** that address the most common health concerns that Americans face. To align with National Quality Strategy, stakeholders can use **nine levers** to align their core business or organizational functions to drive improvement on the aims and priorities.

To advance these aims, the National Quality Strategy focuses on six priorities (domains):

- Making care safer by reducing harm caused in the delivery of care.
- Ensuring that each person and family is engaged as partners in their care.
- Promoting effective communication and coordination of care.

- Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease.
- Working with communities to promote wide use of best practices to enable healthy living.
- Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new health care delivery models.

Measure: A mechanism to assign a quantity to an attribute by comparison to a criterion. A measure may stand alone or belong to a composite, subset, set, and/or collection of measures. A healthcare performance measure is a way to calculate whether and how often the healthcare system does what it should. Measures are based on scientific evidence about processes, outcomes, perceptions, or systems that relate to high-quality care. See CMS Measure Blueprint.

Numerator: The upper portion of a fraction used to calculate a rate, proportion, or ratio. Also called the measure focus, it is the target process, condition, event, or outcome. Numerator criteria are the processes or outcomes expected for each patient, procedure, or other unit of measurement defined in the denominator. A numerator statement describes the clinical action that satisfies the conditions of the performance measure.

Numerator exclusions: Patients who are included in the initial patient population, who do not meet the measure numerator criteria, but who do meet the specific numerator exclusionary criteria. Numerator exclusions are not considered to be part of a given measure’s numerator.

Outcome Measure: A measure that assesses the results of healthcare that are experienced by patients: clinical events, recovery and health status, experiences in the health system, and efficiency/cost. See CMS Measure Blueprint.

Performance Measure Reporting Modifier: The 8P reporting modifier is intended to be used as a “reporting modifier” to allow the reporting of circumstances when an action described in a measure’s numerator is not performed and the reason is not otherwise specified.

Performance Timeframe: A designated timeframe within which the action described in a performance measure should be completed. This timeframe is generally included in the measure description and may or may not coincide with the measure’s data reporting frequency requirement.

Physician Quality Reporting System (PQRS): The Physician Quality Reporting System (PQRS) is a quality reporting program that encourages individual eligible professionals (EPs) and group practices to report information on the quality of care to Medicare. PQRS gives participating EPs and group practices the opportunity to assess the quality of care they provide to their patients, helping to ensure that patients get the right care at the right time.

Process Measure: A measure that focuses on steps that should be followed to provide good care. There should be a scientific basis for believing that the process, when executed well, will increase the probability of achieving a desired outcome. See CMS Measure Blueprint.

Proportion Measure: A score derived by dividing the number of cases that meet a criterion for quality (the numerator) by the number of eligible cases within a given time frame (the denominator) where the numerator cases are a subset of the denominator cases (for example, percentage of eligible women with a mammogram performed in the last year).

Qualified Clinical Data Registry (QCDR): A CMS-approved entity that collects medical and/or clinical data for the purpose of patient and disease tracking to foster improvement in the quality of care provided to patients. A

QCDR will complete the collection and submission of PQRS quality measures data on behalf of individual eligible professionals (EPs).

Quality: Quality is how good something is. For healthcare, it is often expressed in a range. When a person receives high-quality healthcare, he or she has received the right services, at the right time, and in the right way to achieve the best possible health. See NQF Phrase Book.

Quality-Data Codes: QDCs are non-payable Healthcare Common Procedure Coding System (HCPCS) codes composed of specified CPT Category II codes and/or G-codes that describe the clinical action required by a measure's numerator. Clinical actions can apply to more than one condition and, therefore, can also apply to more than one measure. Where necessary, to avoid shared CPT Category II codes, G-codes are used to distinguish clinical actions across measures. Some measures require more than one clinical action and may have more than one CPT Category II code, G-code, or a combination associated with them. EPs should review numerator reporting instructions for each measure carefully.

Quality Improvement: Quality improvement (QI) encompasses all of the work people are doing to improve healthcare and the health of individuals and populations. QI is both systematic and ongoing. Healthcare professionals and providers, consumers, researchers, employers, health plans, suppliers and other stakeholders all contribute to effective quality improvement. Clinical quality improvement is a type of QI specifically designed to raise the standards for preventing, diagnosing, and treating poor health. ([NQF Phrase Book](#))

Risk-Adjustment: Statistical process used to identify and adjust for extraneous variables not associated with care delivery that threaten validity because they affect the outcome being measured outside of the health system's control/ The purpose is a fairer and more accurate comparison of outcomes of care across healthcare organizations or providers.

Specifications: Measure instructions that address the following: data elements, data sources, point of data collection, timing and frequency of data collection and reporting, specific instruments to be used (if appropriate), and implementation strategies.

Measure Title

***ASA #8: Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)**

Measure Description

Percentage of patients aged 3 through 17 years of age, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for post-operative vomiting (POV), who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively.

NQS Domain

Person and Caregiver-Centered Experience and Outcomes

Instructions:

This measure is to be reported each time a patient having risk factors for POV is treated preoperatively or intraoperatively following inhalation general anesthetic.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, patient demographics and registry codes are used to identify patients who are included in the measure's denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting with claims, submit the listed CPT codes, and the appropriate CPT Category II code or the appropriate CPT Category II code with the modifier. The modifiers allowed for this measure are: 1P - medical reasons, 8P - reason not otherwise specified. All measure-specific coding should be reported on the claims representing the eligible encounter as the denominator codes.

Denominator

All patients, aged 3 through 17 years of age, who undergo a procedure under general anesthesia in which an inhalational anesthetic is used for maintenance AND who have two or more risk factors for POV.

Definition: Risk factors for POV are:

- Surgery ≥ 30 minutes
- Age ≥ 3 years
- Strabismus surgery
- History of POV or PONV in parent or sibling

Denominator Criteria (Eligible Cases):

Patients Aged ≥ 3 years old and ≤ 17 years old

AND

Patient received general anesthetic with inhalational anesthetic for maintenance (ASA08A)

AND

Patient has two or more risk factors for POV (ASA08B)

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810,

00820, 00830, 00832, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Cases in which an inhalational anesthetic is used only for induction
- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who receive combination therapy consisting of at least two prophylactic pharmacologic anti-emetic agents of different classes preoperatively or intraoperatively

Definition: The recommended pharmacologic anti-emetics for POV prophylaxis in pediatric patients at risk of POV include (but may not be limited to):

- 5-hydroxytryptamine (5-HT₃) receptor antagonists (recommended as the first choice for prophylaxis for POV in children)
- Dexamethasone
- Antihistamines
- Butyrophenones

The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA's web site page entitled "Drug Safety Communications" for up-to-date drug recall and alert information when prescribing medications.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

4558F Patient received at least 2 prophylactic pharmacologic anti-emetic agents of different classes preoperatively and intra-operatively

OR

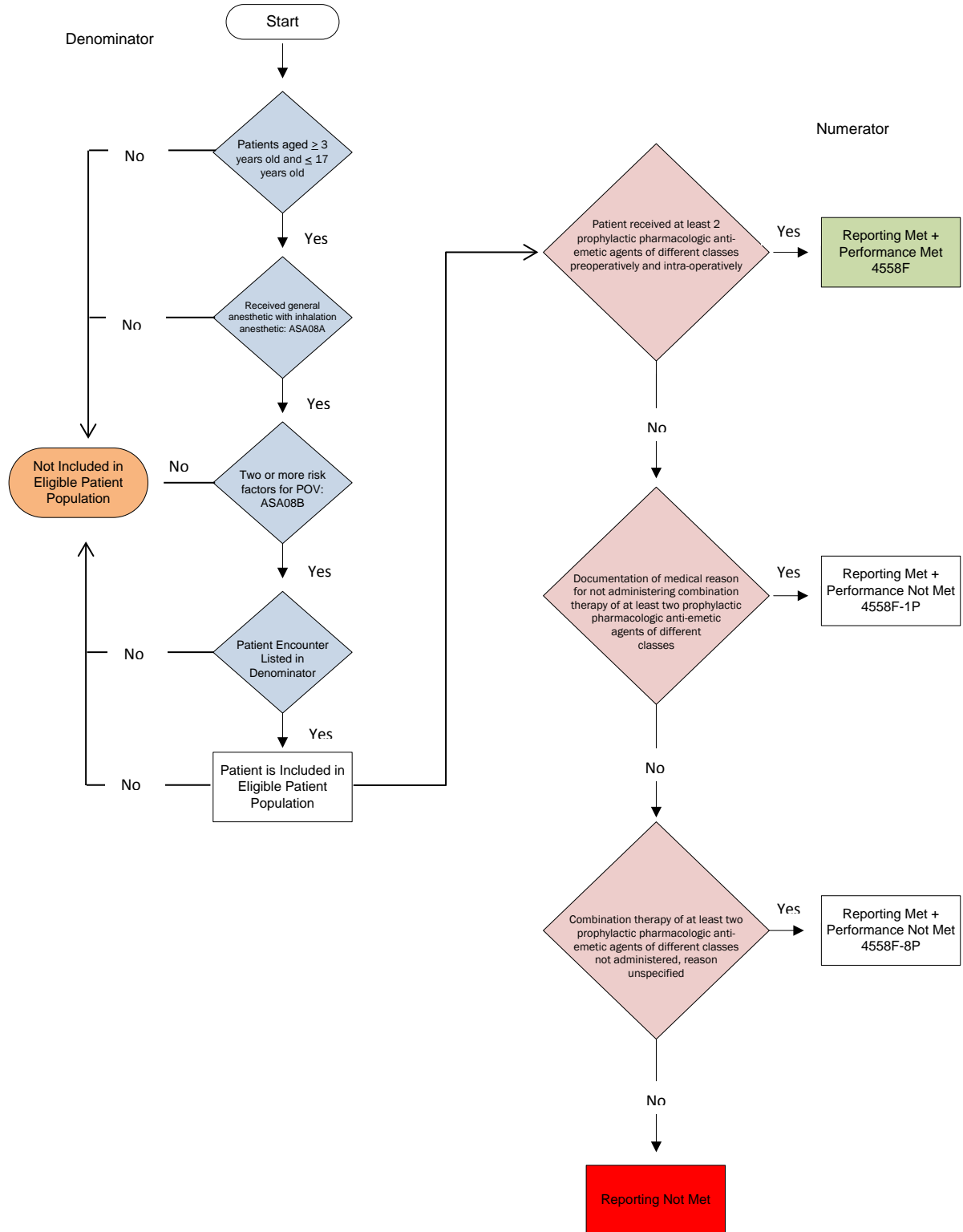
Performance Not Met – Medical Performance Exclusion:

4558F-1P Documentation of medical reason(s) for not administering combination therapy of at least two prophylactic pharmacologic anti-emetic agents of different classes (eg, intolerance or other medical reason)

OR

Performance Not Met – Reason Unspecified:

Prevention of Post-Operative Vomiting (POV) – Combination Therapy (Pediatrics)



Measure Title

ASA #10: Composite Anesthesia Safety

Measure Description

Percentage of patients, regardless of age, who undergo a procedure* under anesthesia without the occurrence of a major adverse event prior to completion of anesthesia care.

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo a procedure* under anesthesia

Definition: *Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who did not experience a major adverse event prior to completion of anesthesia care**.

Definition: Major adverse events of anesthesia are defined according to the 2009 Committee of Performance and Outcomes Measurement work product “Development of the ASA Critical Incidents Reporting System. The adverse events and their definitions can be accessed here:

<http://www.aqihq.org/files/CPOM-registry-data-set.pdf>. Adverse events include:

- Death
- Cardiac arrest
- Perioperative myocardial infarction
- Anaphylaxis
- Malignant hyperthermia
- Transfusion reaction
- Stroke, cerebral vascular accident, or coma following anesthesia
- Visual loss
- Operation on incorrect site
- Operation on incorrect patient
- Medication error
- Unplanned ICU admission
- Intraoperative awareness
- Unrecognized difficult airway
- Reintubation
- Dental trauma
- Perioperative aspiration
- Vascular access complication, including vascular injury or pneumothorax
- Pneumothorax following attempted vascular access or regional anesthesia
- Infection following epidural or spinal anesthesia
- Epidural hematoma following spinal or epidural anesthesia
- High Spinal
- Postdural puncture headache
- Major systemic local anesthetic toxicity
- Peripheral neurologic deficit following regional anesthesia
- Infection following peripheral nerve block

** Anesthesia care is completed when the patient is discharged from the Postanesthesia Care Unit (PACU) or admitted to the Intensive Care Unit.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA10A: Patient did not experience an adverse event prior to completion of anesthesia care.

OR

Performance Not Met:

ASA10B: Patient experienced an adverse event prior to completion of anesthesia care

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Serious adverse events are rare in anesthesia care, but can be assessed for performance improvement purposes as a composite of mortality, major organ system injury, and unintended events (e.g. anaphylaxis, cardiac arrest) that carry a high risk. Completion of anesthesia care WITHOUT complication is the fundamental goal of both patients and anesthesia providers, suggesting that this metric is at the core of assessment for the specialties involved.

Major adverse events of anesthesia are defined and clinical recommendations are available according to the 2009 Committee of Performance and Outcomes Measurement work product “Development of the ASA Critical Incidents Reporting System.” The adverse events and their definitions can be accessed here: <http://www.aqihq.org/files/CPOM-registry-data-set.pdf>.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

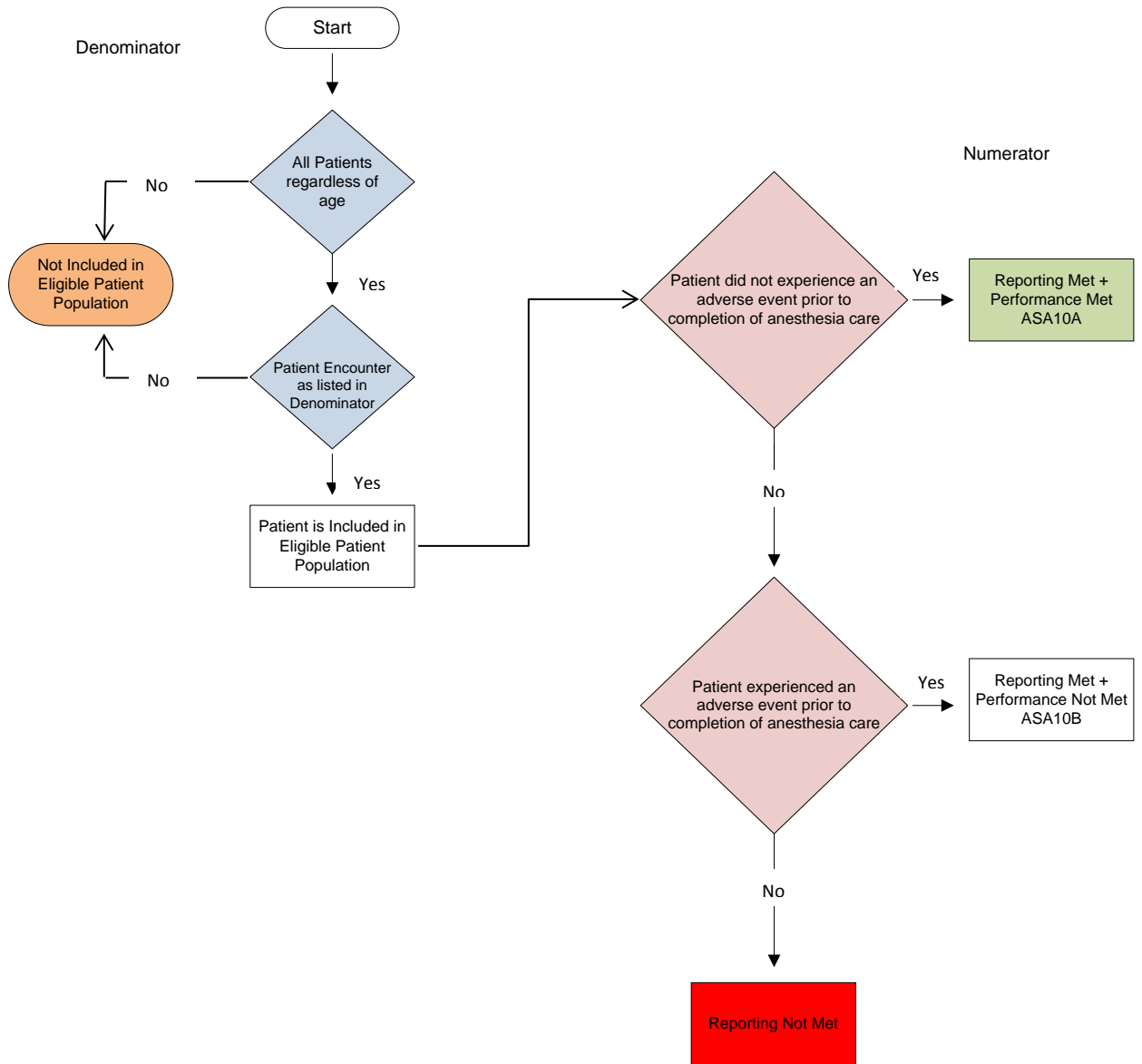
Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Composite Anesthesia Safety



Measure Title:

ASA #11: Perioperative Cardiac Arrest

Measure Description

Percentage of patients who experience a cardiac arrest* under the care of an anesthesia provider in the operating room or postanesthesia care unit.

NQS Domain

Patient Safety

Instructions:

This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia that does not include planned cardiac arrest.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry Codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo a procedure* under anesthesia.

Definition: *Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00532, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01953, 01958, 01961, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Cases with planned cardiac arrest – deep hypothermia, electrophysiology cases, cardiac bypass cases
- Emergent cases identified by ASA Physical Status indicating case is emergent by using ‘E’ designation
- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who experienced an unanticipated cardiac arrest prior to completion of anesthesia care**.

Definition: Cardiac arrest: Cardiac arrest is broadly defined as the cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation. For the present registry, subcommittee members agreed that the definition should include the following use of cardiac compressions and/or defibrillation.

Reporting of the etiology of cardiac arrest, may include, but not be limited to:

- a. Ventricular fibrillation
- b. Rapid ventricular tachycardia with hemodynamic instability
- c. Asystole
- d. Extreme bradycardia with hemodynamic instability

** Anesthesia care is completed when the patient is discharged from the Postanesthesia Care Unit (PACU) or admitted to the Intensive Care Unit.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA11A: Patient experienced an unanticipated cardiac arrest

OR

Performance Not Met:

ASA11B: Patient **did not** experience unanticipated cardiac arrest

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Cardiac arrest in the perioperative period is an unintended serious adverse event, associated with immediate mortality of about 50%. Arrest can occur as the result of sudden physiologic disruption due to surgery or medications (e.g. anaphylaxis, air embolus) or as the cumulative result of progressive deterioration (e.g. bleeding, heart failure). Prevention of cardiac arrest is a core goal of anesthesia providers, with high face validity as a discriminator of the quality of anesthesia care.

Cardiac arrest is defined and clinical recommendations are available according to the 2009 Committee of Performance and Outcomes Measurement work product "Development of the ASA Critical Incidents Reporting System. The adverse events and their definitions can be accessed here: <http://www.aqihq.org/files/CPOM-registry-data-set.pdf>. Cardiac arrest is broadly defined as the cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation[1]. For the present registry, subcommittee members agreed that the definition should include the following criteria: (1) use of cardiac compressions and/or defibrillation and (2) during the first 48 hours after induction of anesthesia.

Jacobs, I., et al., Cardiac arrest and cardiopulmonary resuscitation outcome reports: update and simplification of the Utstein templates for resuscitation registries: a statement for healthcare professionals from a task force of the

International Liaison Committee on Resuscitation (American Heart Association, European Resuscitation Council, Australian Resuscitation Council, New Zealand Resuscitation Council, Heart and Stroke Foundation of Canada, InterAmerican Heart Foundation, Resuscitation Councils of Southern Africa). *Circulation*, 2004. 110(21): p. 3385-97.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

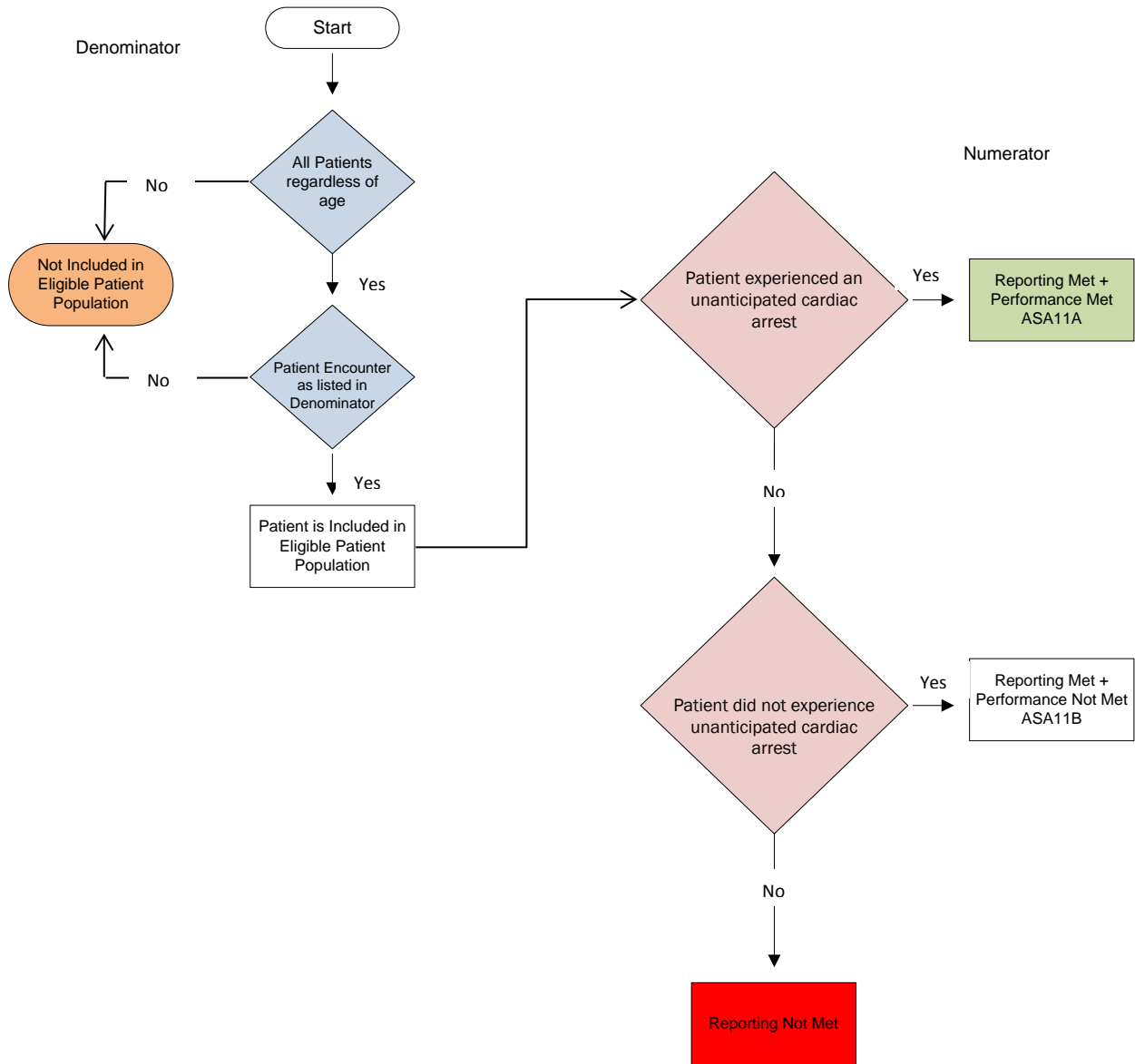
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Perioperative Cardiac Arrest



Measure Title:
ASA #12: Perioperative Mortality Rate

Measure Description

Percentage of patients who experience mortality under the care of an anesthesia provider in the operating room or postanesthesia care unit.

NQS Domain
Patient Safety

Instructions:

This measure is to be reported each time a patient undergoes a surgical, therapeutic or diagnostic procedure under anesthesia.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo a procedure* under anesthesia.

Definition: *Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT):

Anesthesia codes which are commonly indicated for associated surgical procedure(s):

00100,00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01953, 01958, 01961, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status of 6
- ASA Physical Status indicating case is emergent by using 'E' designation

Numerator

Patients who died prior to completion of anesthesia care**.

Numerator Quality-Data Coding Options for Reporting Satisfactorily***Performance Met:***

ASA12A: Patient died

OR***Performance Not Met:***

ASA12B: Patient **did not** die

** Anesthesia care is completed when the patient is discharged from the Postanesthesia Care Unit (PACU) or admitted to the Intensive Care Unit.

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Mortality is the outcome of ultimate interest to patients and providers. Albeit very rare in the perioperative period, death in the OR or PACU is a sentinel event in any anesthesia department. Capturing this data in a uniform fashion will allow assessment of variability across practices and facilities, as well as identification of the rare outlier at the individual physician level.

Mortality is defined and clinical recommendations are available according to the 2009 Committee of Performance and Outcomes Measurement work product "Development of the ASA Critical Incidents Reporting System. The adverse events and their definitions can be accessed here: <http://www.aqihq.org/files/CPOM-registry-data-set.pdf>.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

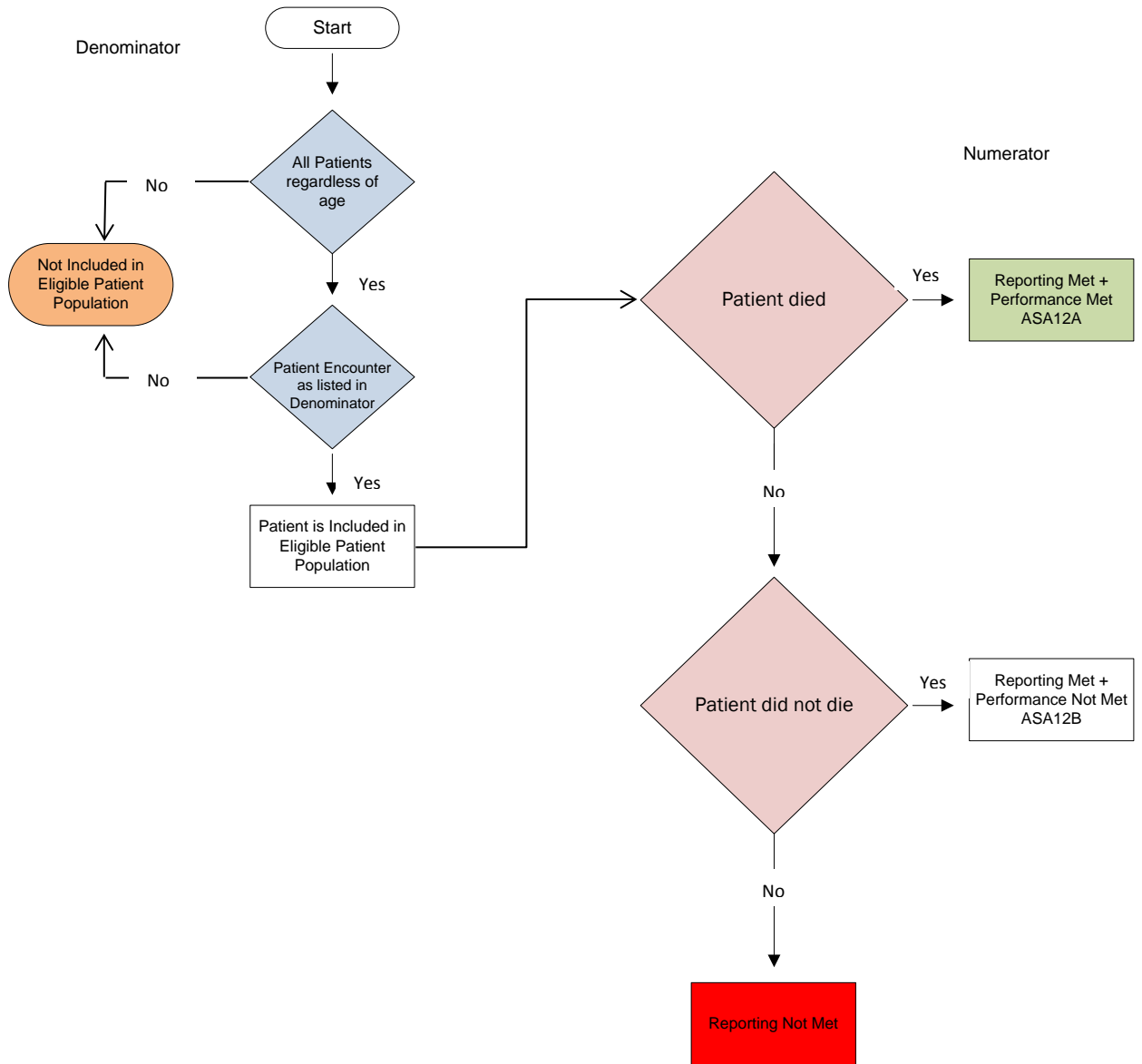
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Perioperative Mortality Rate



Measure Title:

ASA #13: Postanesthesia Care Unit (PACU) Re-intubation Rate

Measure Description

Percentage of patients, regardless of age, who were extubated in the operating room or the postanesthesia care unit following general anesthesia but required re-intubation prior to PACU discharge.

NQS Domain

Patient Safety

Instructions:

This measure is to be reported each time a patient who undergoes a procedure under general anesthesia has a supraglottic airway (SGA) or endotracheal tube (ETT) placed for the procedure and then removed in the operating room or PACU.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, registry codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of this measure.

Denominator

All patients, regardless of age, who undergo a procedure under general anesthesia facilitated by an SGA or ETT that was removed in the operating room or postanesthesia care unit.

Denominator Definition: For the purposes of this measure the terms “removed” and “extubated” are synonymous.

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient underwent a procedure under general anesthesia facilitated by an SGA or ETT: **ASA13H**

AND

SGA or ETT was removed in the operating room or postanesthesia care unit: **ASA13J**

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00834, 00836, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832,

01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01958, 01961, 01963, 01965, 01966, 01991, 01992

Denominator Exclusions / Exceptions

- Patients transferred directly to the Intensive Care Unit (ICU) from the Operating Room (OR).
- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who required new management with an Endotracheal Tube (ETT), supraglottic airway (SGA) or new surgical airway prior to PACU discharge

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA13A: Patient required new airway management prior to PACU discharge.

Performance Not Met

ASA13B: Patient did not require new airway management prior to PACU discharge.

Performance Not Met – Medical Performance Exclusion

ASA13G: Patient received a planned trial of extubation documented in the medical record prior to removal of the original airway device

Measure Type: Intermediate Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

The need for early repeat airway management of surgical patients is strongly associated with subsequent serious adverse outcomes; prolonged ICU and hospital stay, and increased costs of care. Assessment of this metric under a unified definition will be an important tool for benchmarking the performance of surgical facilities, anesthesia departments, and individual practitioners.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

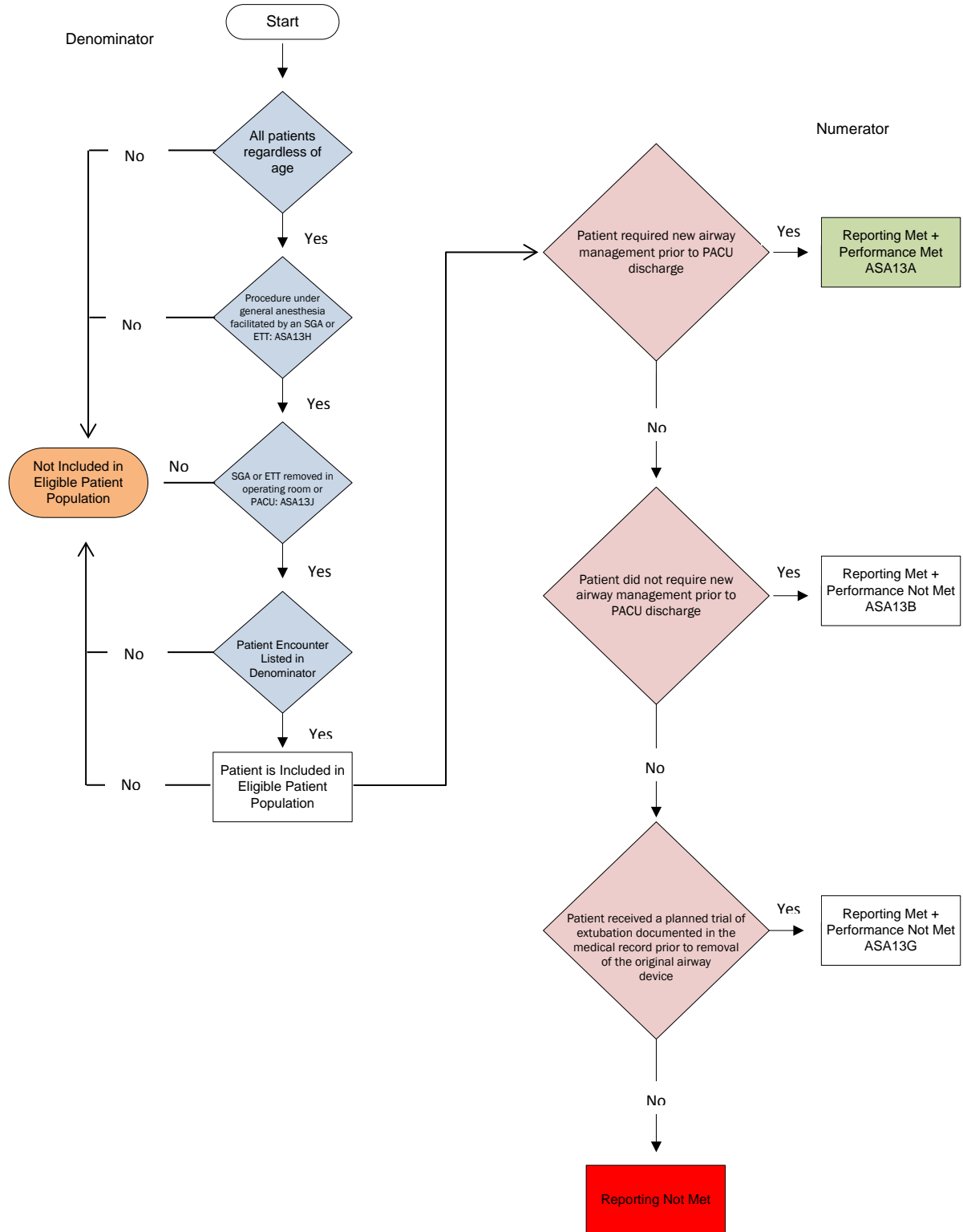
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Postanesthesia Care Unit (PACU) Re-Intubation Rate



Measure Title:

ASA #14: Assessment of Acute Postoperative Pain

Measure Description

Percentage of patients aged 10 years or older admitted to the postanesthesia care unit (PACU) following an anesthetic with an initial pain score < 7 out of 10.

NQS Domain

Person and Caregiver-Centered Experience and Outcomes

Instructions:

This measure is to be reported each time a patient is admitted to the PACU following a procedure that included an anesthetic during the reporting period.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, registry codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to identify the numerator.

Denominator

All patients age 10 years and older admitted to PACU who are assessed for pain.

Denominator Criteria (Eligible Cases):

Patients age 10 years or older on date of encounter

AND

Patient assessed for pain in the postanesthesia care unit: **ASA14H**

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01953, 01958, 01961, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients with an initial pain score < 7 out of 10

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA14B: Patient has an initial pain score of < 7 out of 10

OR

Performance Not Met:

ASA14A: Patient has an initial pain score of ≥ 7 out of 10

Measure Type: Intermediate Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Alleviation of pain is a core responsibility of the anesthesia provider, and adequate postoperative pain control is an important component of patient satisfaction with anesthesia and surgery. A large body of literature exists to support evidence-based practice in this area. Significant variability in outcomes exists at the practice, facility and individual provider level. Capture of this metric under a common definition will greatly enhance anesthesia quality management and lead directly to improvements in patient outcome.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

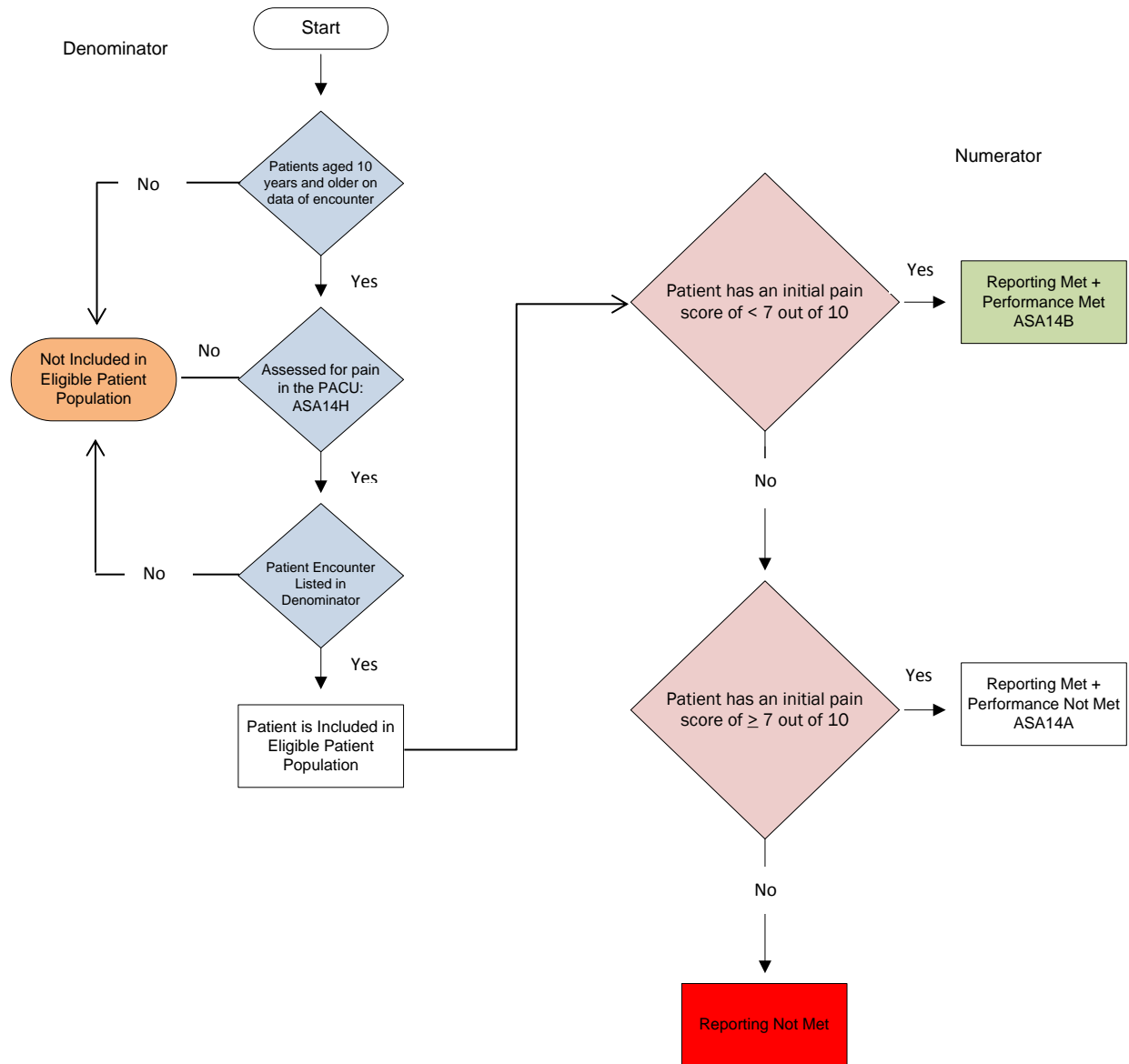
Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Assessment of Acute Postoperative Pain



Measure Title:

ASA #15: Composite Procedural Safety for Central Line Placement

Measure Description

Percentage of patients, regardless of age, who did not experience pneumothorax or arterial injury who undergo central venous cannulation insertion.

NQS Domain

Patient Safety

Instructions:

This measure is to be reported each time a central venous cannulation is attempted during the reporting period. It is anticipated that clinicians who attempt central venous cannulation insertions will submit this measure.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. CPT Category codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo central venous cannulation insertion.

Denominator Definition: For the purposes of this measure, clinicians should report the measure if also in circumstances where central venous cannulation was attempted and the appropriate denominator criteria were recorded.

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient encounter during the reporting period (CPT): 36555, 36556, 36557, 36558, 36560, 36561, 36563, 36565, 36566, 36568, 36569, 36570, 36571, 36575, 36576, 36578, 36580, 36581, 36582, 36583, 36584, 36585, 36589, 36590, 36592, 36595, 36596, 36597, 36598, 93503

Denominator Exclusions/Exceptions

- Organ Donors as designated by ASA Physical Status 6
- ASA Physical Status indicating case is emergent by using 'E' designation

Numerator

Patients who did not experience and arterial injury or pneumothorax requiring thoracostomy placement or decompression of the pleural cavity (from the medical record or PSI code).

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA15B: Patient did not experience an arterial injury or pneumothorax requiring thoracostomy placement.

OR

Performance Not Met

ASA15A: Patient did experience an arterial injury or pneumothorax requiring thoracostomy placement

OR

Patient encounter during the reporting period (CPT): 32035, 32036, 32551

Measure Type: Intermediate Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Central venous cannulation may be associated with serious adverse events. Arterial injury and pneumothorax each require additional treatment that adds to the cost and discomfort of care. Recent scientific literature has documented that the risk for these complications can be reduced through evidence-based practice. This measure will allow for documentation of variability in occurrence of this outcome, and will empower quality improvement efforts.

Vascular access complication, including vascular injury or pneumothorax as well as pneumothorax following attempted vascular access or regional anesthesia is described in the 2009 Committee of Performance and Outcomes Measurement work product “Development of the ASA Critical Incidents Reporting System. The adverse events and their definitions can be accessed here: <http://www.aqihq.org/files/CPOM-registry-data-set.pdf>. Additional reference may be found in the [ASA Statement on Intravascular Catheterization Procedures](#).

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

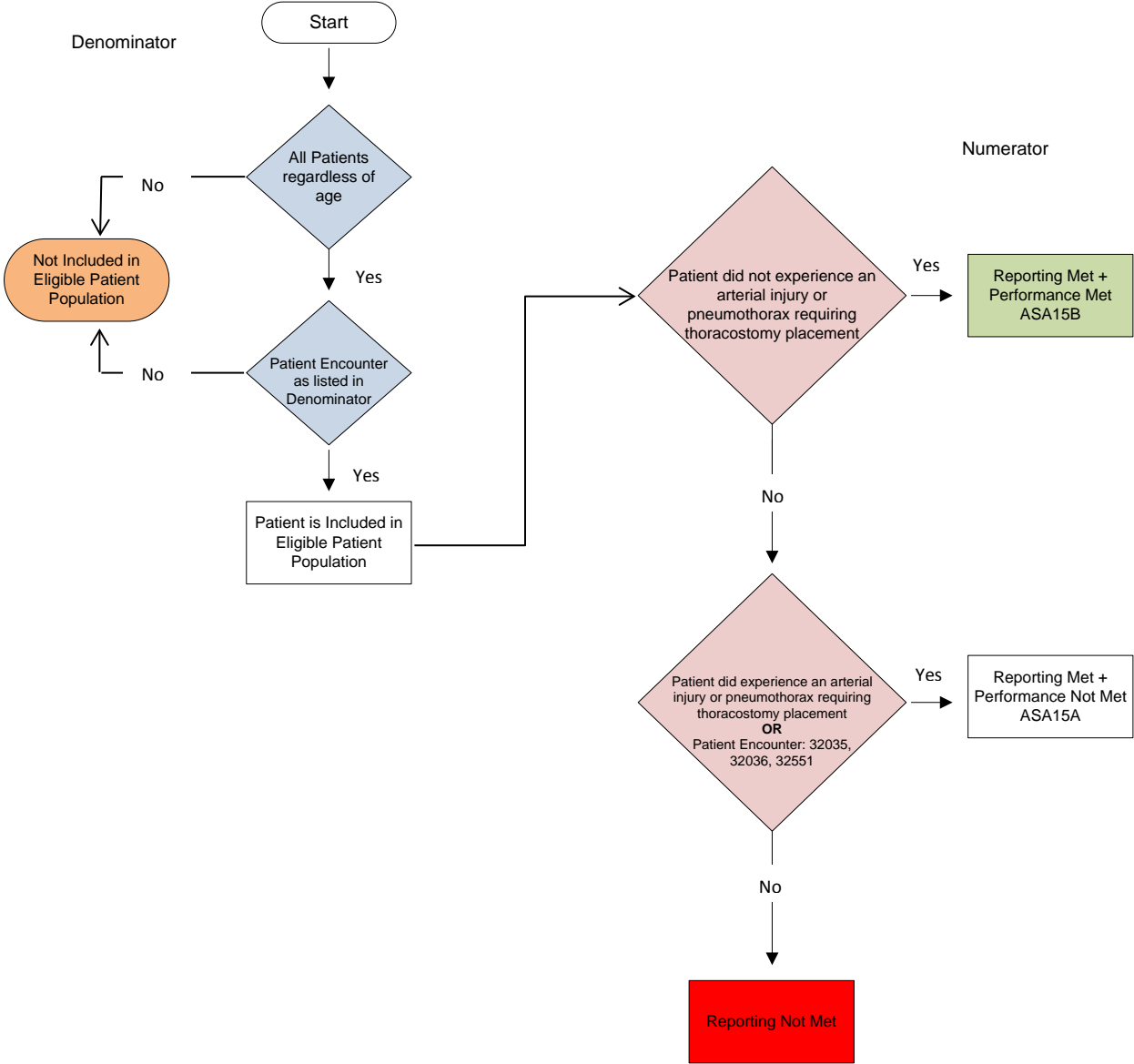
Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Composite Procedural Safety for Central Line Placement



Measure Title:

ASA #16: Composite Patient Experience

Measure Description

Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care (e.g. private vendor assessment of patient experience and satisfaction, Consumer Assessment of Healthcare Providers and Systems Surgical Care Survey or S-CAHPS). The survey tool used must reflect and take into consideration the recommendations of the ASA Committee on Performance and Outcomes Measurement work product entitled "[Patient Satisfaction and Experience with Anesthesia.](#)"

NQS Domain

Person and Caregiver-Centered Experience and Outcomes

Instructions:

This measure is to be reported each time a patient underwent a procedure* with anesthesia during the reporting period.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure denominator. Registry codes are used to report the measure numerator.

Denominator

Patients, aged 18 and older, who undergo a procedure* under anesthesia.

Definition: * Any procedure including surgical, therapeutic or diagnostic

Denominator Criteria (Eligible Cases):

Patients aged ≥ 18 years on date of encounter

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00562, 00563, 00566, 00567, 00580, 00600, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00840, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01935, 01936, 01951, 01952, 01953, 01958, 01961, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- ASA Physical Status indicating case is emergent by using “E” designation or designated by code 99140
- Organ Donors as designated with ASA Physical Status 6

Numerator

Patients who received a survey* or similar tool used to assess their experience and satisfaction with anesthesia.

Definition: * The survey tool used must reflect and take into consideration the recommendations of the ASA Committee on Performance and Outcomes Measurement work product entitled “[Patient Satisfaction and Experience with Anesthesia.](#)”

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA16A: Patient provided with a survey or similar tool to assess their experience and satisfaction with anesthesia

OR

Performance Not Met

ASA16B: Patient was not provided with a survey or similar tool to assess their experience and satisfaction with anesthesia

OR

Performance Not Met:

ASA16F: Patient unable to be surveyed because of cognitive impairment.

OR

Structural Performance Not Met:

ASA16G: Provider unable to send patient survey or similar tool in patient’s preferred language

Measure Type: Process

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Patient-centered outcomes are important discriminators of the quality of anesthesia practice. Anesthesia departments and individual providers should have access to relevant CAHPS and other patient survey data collected by the facility or practice as a means of guiding quality improvement initiatives.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

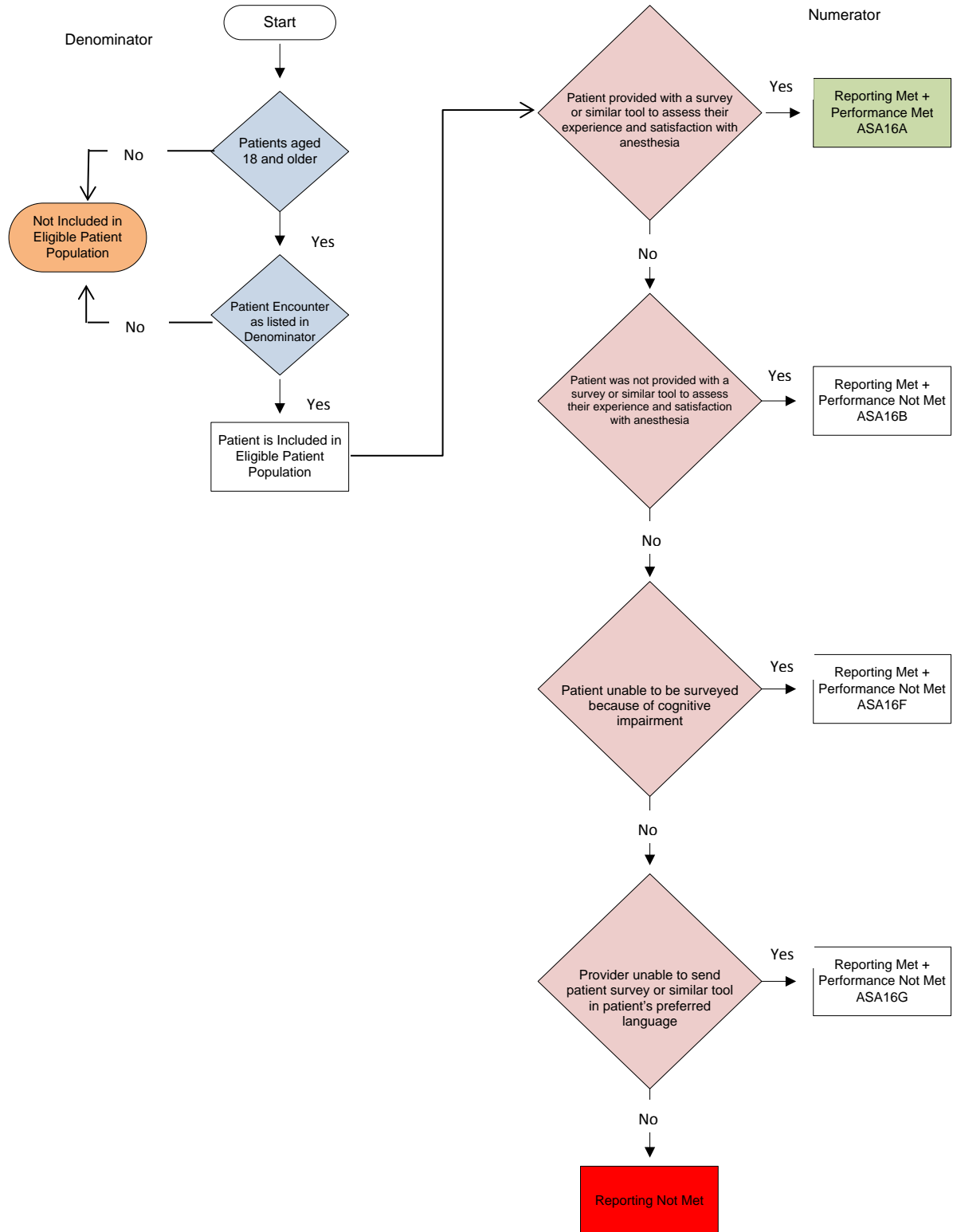
Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Composite Patient Experience



Measure Title

***ASA #20: Surgical Safety Checklist – Applicable Safety Checks Completed Before Induction of Anesthesia**

Measure Description

Percentage of patients, regardless of age, who undergo a surgical procedure under anesthesia who have documentation that all applicable safety checks from the World Health Organization (WHO) Surgical Safety Checklist (or other surgical checklist that includes the applicable safety checks for the specific procedure) were performed before induction of general anesthesia

NQS Domain

Patient Safety

Instructions:

This measure is to be reported each time a patient undergoes a surgical procedure under general anesthesia.

Measure Reporting via the Qualified Clinical Data Registry

For this measure, report the appropriate registry codes for each patient for whom all applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) were performed before induction of general anesthesia.

Denominator

All patients, regardless of age, who undergo a surgical procedure under anesthesia

Denominator Criteria (Eligible Cases):

All patients, regardless of age

AND

Patient underwent a surgical procedure under anesthesia: **ASA20C**

AND

Patient encounter during the reporting period (CPT): 00100, 00102, 00103, 00104, 00120, 00124, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01953, 01961, 01962, 01963, 01965, 01966, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who have documentation that all applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) were performed before induction of general anesthesia.

Definition:

The WHO Surgical Safety Checklist includes the following items

Before Induction of Anesthesia

- Has the patient confirmed his/her identity, site, procedure and consent?
- Is the site marked?
- Is the anaesthesia machine and medication check complete?
- Is the pulse oximeter on the Patient And Functioning?
- Does the Patient have a:
 - Known Allergy?
 - Difficult Airway/Aspiration Risk?
 - Risk of >500 ml Blood Loss (7ml/kg in children)?

Numerator Quality-Data Coding Options for Reporting Satisfactorily:

Performance Met

ASA20A: All applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) performed before induction of anesthesia

OR

Performance Not Met

ASA20B: All applicable safety checks of the WHO Surgical Safety Checklist (or other surgical checklist that includes the safety checks for specific procedure) NOT performed before induction of anesthesia

Measure Type: Process

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

In 2009, the World Health Organization (WHO) Safe Surgery Saves Lives Study Group published a study showing that utilization of a surgical safety checklist resulted in reduced perioperative mortality and complication rates. Since then, surgical safety checklists have been widely implemented around the world. Further studies confirm the WHO findings that implementation of the surgical safety checklist improves communication among members of the surgical team and reduces perioperative morbidity and mortality.

While the number of surgery-related sentinel events has decreased over the past several years, operative care still remains one of the top ten root causes for sentinel events. To address patient safety concerns in the operating room, surgical safety checklists have been widely implemented in recent years. However, compliance with

surgical safety checklists and safety checklist protocols has been shown to vary widely. The level of checklist compliance has been shown to vary depending on the implementation strategy.

WHO Guidelines for Safe Surgery

The World Health Organization's Surgical Safety Checklist reinforces established safety practices and ensures beneficial preoperative, intraoperative and postoperative steps are undertaken in a timely and efficient way.

Introducing key safety elements into the operating routine, teams could maximize the likelihood of the best outcome for all surgical patients without placing an undue burden on the system or the providers.

WHO Surgical Safety Checklist is available at <http://www.who.int/patientsafety/safesurgery/en/>

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

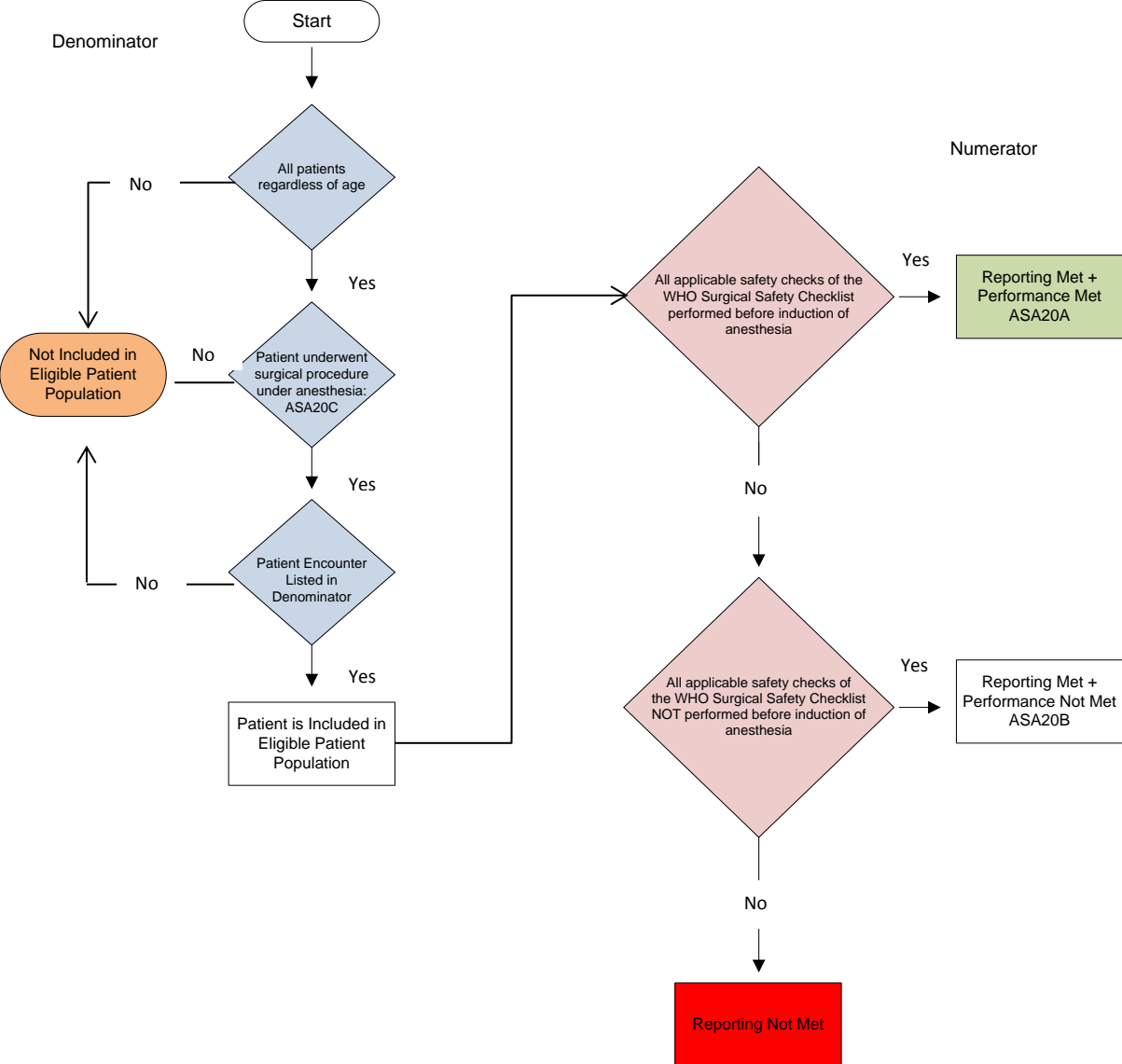
Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Surgical Safety Checklist – Applicable Safety Checks Completed Before Induction of Anesthesia



Measure Title**ASA #23: Coronary Artery Bypass Graft (CABG): Prolonged Intubation****Measure Description**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation > 24 hours

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time an isolated CABG procedure is performed during the reporting period. It is anticipated that clinicians who provide services for isolated CABG will submit this measure. This measure is intended to reflect the quality of services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure.

Denominator

All patients, aged ≥ 18 years, undergoing isolated CABG Surgery

Denominator Criteria (Eligible Cases):

All patients aged ≥ 18 years on date of encounter

AND

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

AND

00566, 00567

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

AND

Patient encounter during the reporting period (CPT): 33530

AND

00562

Denominator Exclusions / Exceptions

- Organ donors as designated by ASA Physical Status 6

Numerator

Patients undergoing isolated CABG who require intubation > 24 hours following exit from the operating room

Numerator Quality-Data Coding Options for Reporting Satisfactorily***Performance Met:***

Prolonged postoperative intubation (> 24 hrs) required (G8569)

OR

Performance Not Met:

Prolonged postoperative intubation (> 24 hrs) not required (**G8570**)

Measure Type: Outcome
NQF Number: Not applicable
eCQM Number: Not applicable

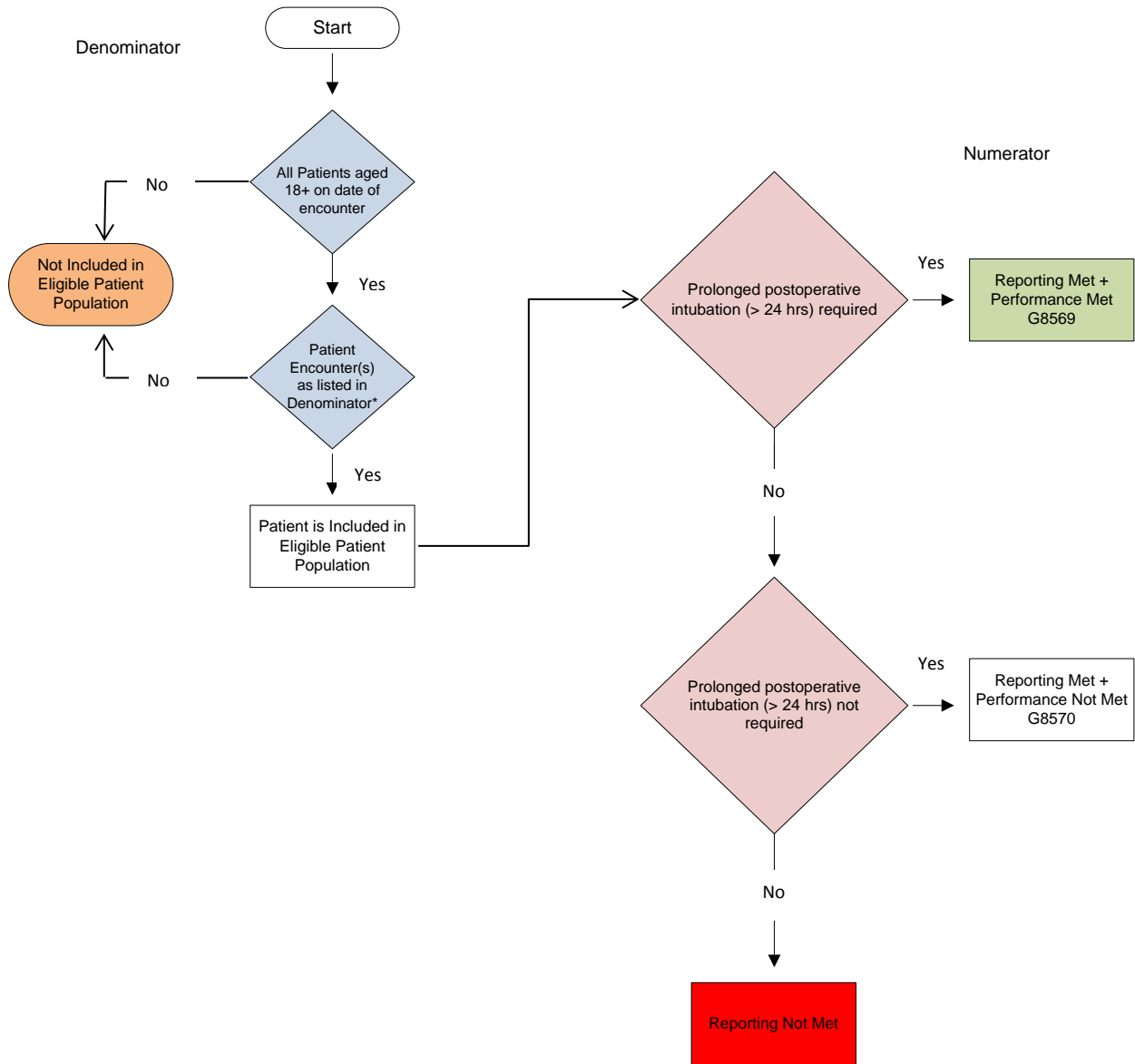
Rationale

Based on an STS coronary artery bypass graft (CABG) study population, the morbidity rate associated with prolonged intubation following CABG is 5.96%. Also, prolonged ventilation (defined as > 24 hours) was an independent predictor for readmission to the ICU following CABG surgery (OR=10.53; CI: 6.18 to 17.91). Shorter ventilation times are linked to high quality of care (ie, reduced in-hospital and operative mortality, as well as better long-term outcomes as compared to prolonged ventilation).

Extubation greater than (>) 24 hours postoperatively is considered a “pulmonary complication”. Patients who were extubated more than 24 hours after surgery had a longer duration of hospital stay and a greater incidence of postoperative complications.

Data Source: Claims/Paper Medical Record, Registry
Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
Number of Multiple Performance Rates: Not applicable
Inverse Measure: Yes
Proportion Measure Scoring: Yes
Continuous Measure Scoring: No
Risk Adjustment: No

Coronary Artery Bypass Graft (CABG): Prolonged Intubation



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title

ASA #24: Coronary Artery Bypass Graft (CABG): Stroke

Measure Description

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who have a *postoperative* stroke (ie, any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time a patient undergoes an isolated CABG procedure is performed during the reporting period. It is anticipated that eligible professionals who provide services, identified by CPT Codes listed below, for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator

All patients, aged ≥ 18 years, undergoing isolated CABG Surgery

Denominator Criteria (Eligible Cases):

All patients aged ≥ 18 years on date of encounter

AND

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

AND

00566, 00567

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients undergoing isolated CABG surgery who have a postoperative stroke (ie, any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

Stroke following isolated CABG surgery (**G8573**)

OR

Performance Not Met:

No stroke following isolated CABG surgery (**G8574**)

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Stroke is a devastating complication after coronary bypass surgery. The 1999 American College of Cardiology/American Heart Association (ACC/AHA) guidelines indicate that adverse cerebral outcomes are observed in ~6% of patients after bypass surgery equally divided between 2 types:

- 1) Associated with major, focal neurological defects, stupor or coma and
- 2) Evidence of deterioration in intellectual function. Type 1 deficits occur in ~3% of patients and are responsible for 21% mortality.

Reports in the literature on postoperative stroke incidence are difficult to compare because the conditions included in the term “stroke” vary. A standardized definition of stroke will provide common language to compare stroke incidence and evaluate management strategies for reducing this devastating complication.

Reported rates of postoperative cerebral dysfunction range from 0.4% to 13.8% following coronary operations. Complications for patients undergoing emergent CABG or valve surgery were greater than the complication rate for patients undergoing elective CABG or valve surgery. As bypass times increased, so did the incidence of stroke. When bypass time was 90 to 113 minutes, OR =1.59, p=0.022 and when bypass time was > 114 minutes, the OR =2.59, p < 0.001. Outcomes are better when patient age is younger and with beating-heart surgery rather than on-pump surgery.

The 1999 ACC/AHA guidelines describe strategies for reducing the risk of postoperative stroke such as an aggressive approach to the management of patients with severely diseased ascending aortas identified by intraoperative echocardiographic imaging, prevention or aggressive management of postoperative atrial fibrillation, delay of bypass surgery in the case of a left ventricular mural thrombus or a recent, preoperative CVA and preoperative carotid screening. Patients should carefully be screened for cerebrovascular disease to help prevent stroke and its associated morbidities.

Use of beta-adrenergic antagonists was associated with a lower incidence of stroke in patients undergoing elective CABG (OR=0.45; 95% CI 0.23 to 0.83; p=0.016). Use of antiplatelet agents within 48 hours of surgery is associated with a decreased risk of stroke (OR=0.51, p=0.01). Increased use of beating-heart surgery without cardiopulmonary bypass may lead to a lower prevalence of stroke following cardiac surgery and thus improve patient outcomes.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

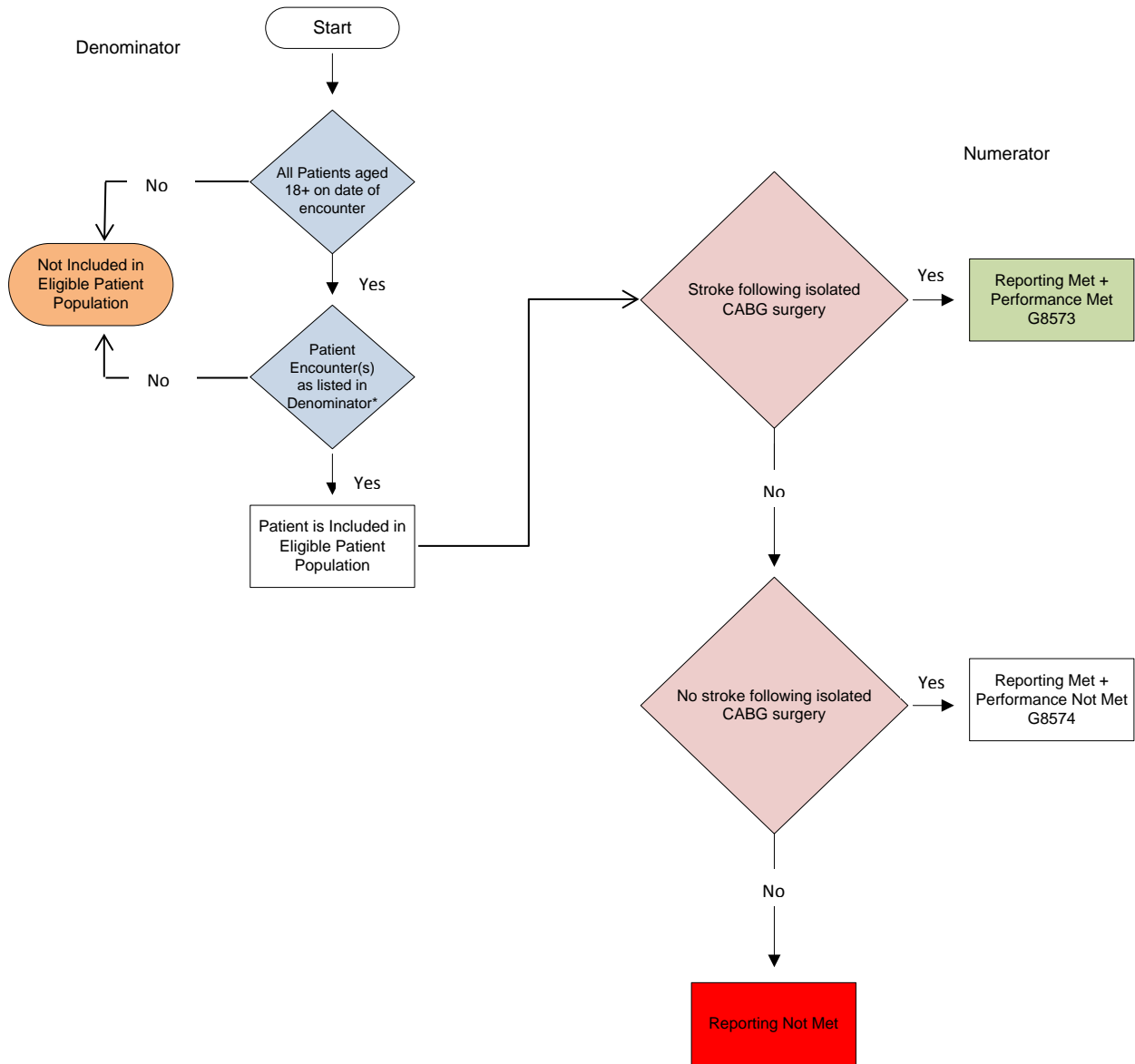
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Coronary Artery Bypass Graft (CABG): Stroke



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title**ASA #25: Coronary Artery Bypass Graft (CABG): Post-Operative Renal Failure****Measure Description**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery (without pre-existing renal failure) who develop postoperative renal failure or require dialysis

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time a patient undergoes an isolated CABG procedure is performed during the reporting period. It is anticipated that eligible professionals who provide services, identified by CPT Codes listed below, for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure. Note that a lower calculated performance rate for this measure indicates better clinical care or control.

Denominator

All patients, aged 18 years or older, undergoing isolated CABG Surgery

Denominator Criteria (Eligible Cases):

All patients aged ≥ 18 years on date of encounter

AND

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

AND

00566, 00567

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who develop postoperative renal failure or require dialysis; (Definition of renal failure/dialysis requirement - patient had acute renal failure or worsening renal function resulting in one of the following: 1) increase of serum creatinine to ≥ 4.0 mg/dL or 3x most recent preoperative creatinine level (acute rise must be at least 0.5 mg/dL), or 2) a new requirement for dialysis postoperatively)

Performance Met:

Developed postoperative renal failure or required dialysis: **G8575**

OR**Performance Not Met:**

No postoperative renal failure/dialysis not required: **G8576**

Measure Type: Outcome
NQF Number: Not applicable
eCQM Number: Not applicable

Rationale

In 2000, coronary artery bypass graft (CABG) surgery was performed on more than 350,000 patients at a cost of close to \$20 billion. Some degree of Acute Renal Dysfunction (ARD) occurs in about 8% of patients following CABG, and dialysis-dependent renal failure occurs in 0.7% to 3.5% of patients receiving CABG. The latter is associated with substantial increases in morbidity, length of stay, and mortality (odds ratios for mortality range from 15 to 27). ARD is associated with increased morbidity, mortality and length of stay in an ICU following surgery. In addition, Acute Renal Failure occurs in 1.5% of patients undergoing any type of cardiac surgery. There has been a substantial increase in postoperative morbidity, mortality, and cost associated with this relatively common complication, regardless of whether or not this incidence varies much between providers, and there are implications of even a modest decrease in its incidence.

Acute renal failure following CABG is an intermediate outcome measure for mortality since this complication is independently associated (OR=27) with early mortality following cardiac surgery, even after adjustment for comorbidity and postoperative complications.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

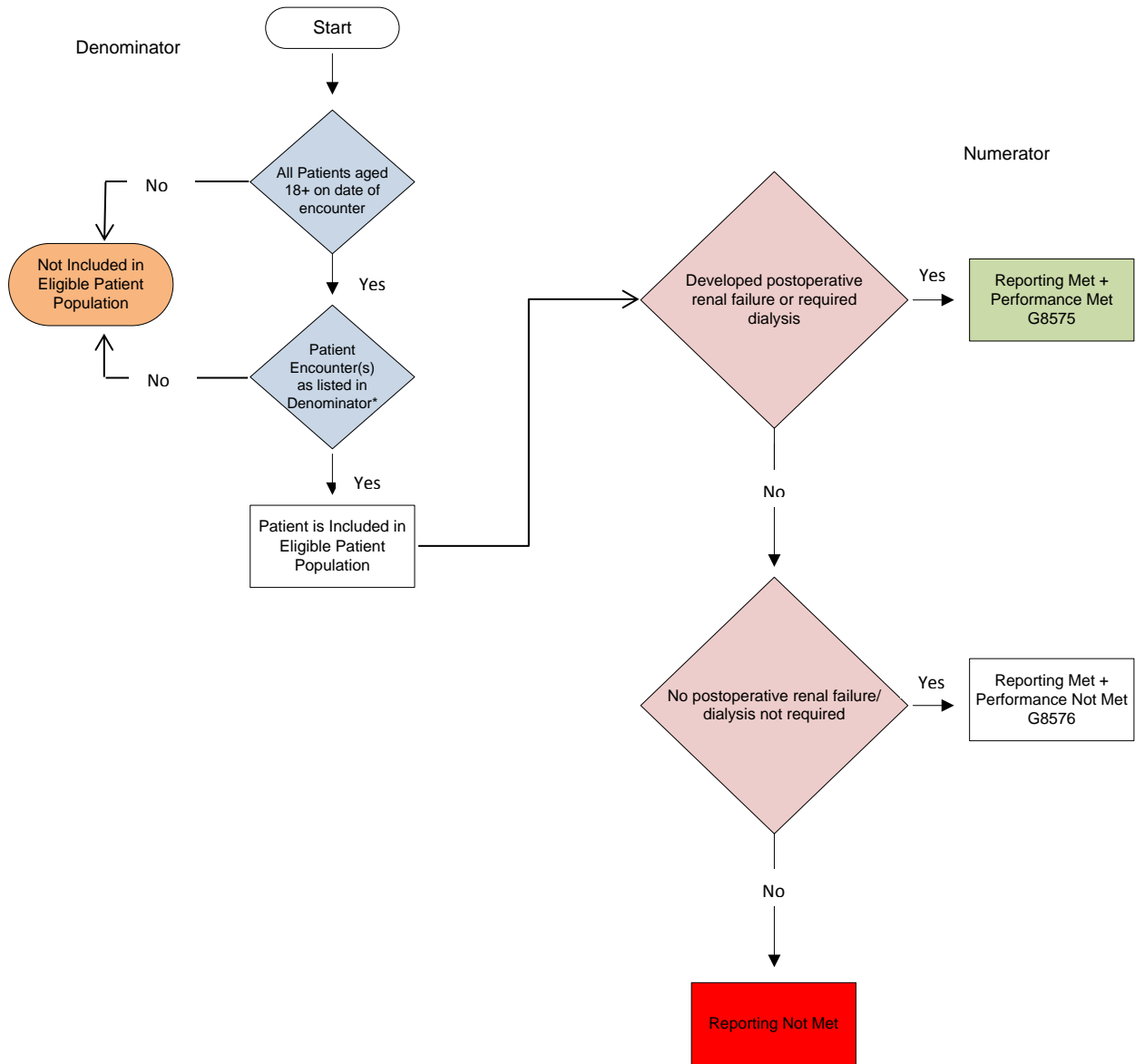
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Coronary Artery Bypass Graft (CABG): Post-Operative Renal Failure



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title

ASA #28: Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Stenting (CAS)

Measure Description

Percentage of asymptomatic patients aged 18 years and older undergoing CAS who experience stroke or death following surgery while in the hospital.

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time a CAS is performed during the reporting period. It is anticipated that clinicians who provide services of CAS, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, CPT Category II Codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure. The measure must capture both the surgical and related anesthesia code. There are no allowable performance exclusions for this measure.

Denominator

Patients aged 18 years or older who are asymptomatic undergoing CAS.

Denominator Criteria (Eligible Cases):

All patients aged 18 years or older on date of encounter

AND

Patient encounter during the reporting period (CPT): 37215

AND

CPT I 01925

AND NOT

Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure: **9006F**

OR

Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke: **9007F**

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who experience stroke or death in the hospital following CAS

Numerator Quality-Data Coding Options for Reporting Satisfactorily***Performance Met:***

Documentation of patient stroke following CAS (G9257)

OR

Performance Met:

Documentation of patient death following CAS (**G9256**)

OR

Performance Not Met:

Documentation of patient survival and absence of stroke following CAS (**G9259**)

Measure Type: Outcome
NQF Number: Not applicable
eCQM Number: Not applicable

Rationale

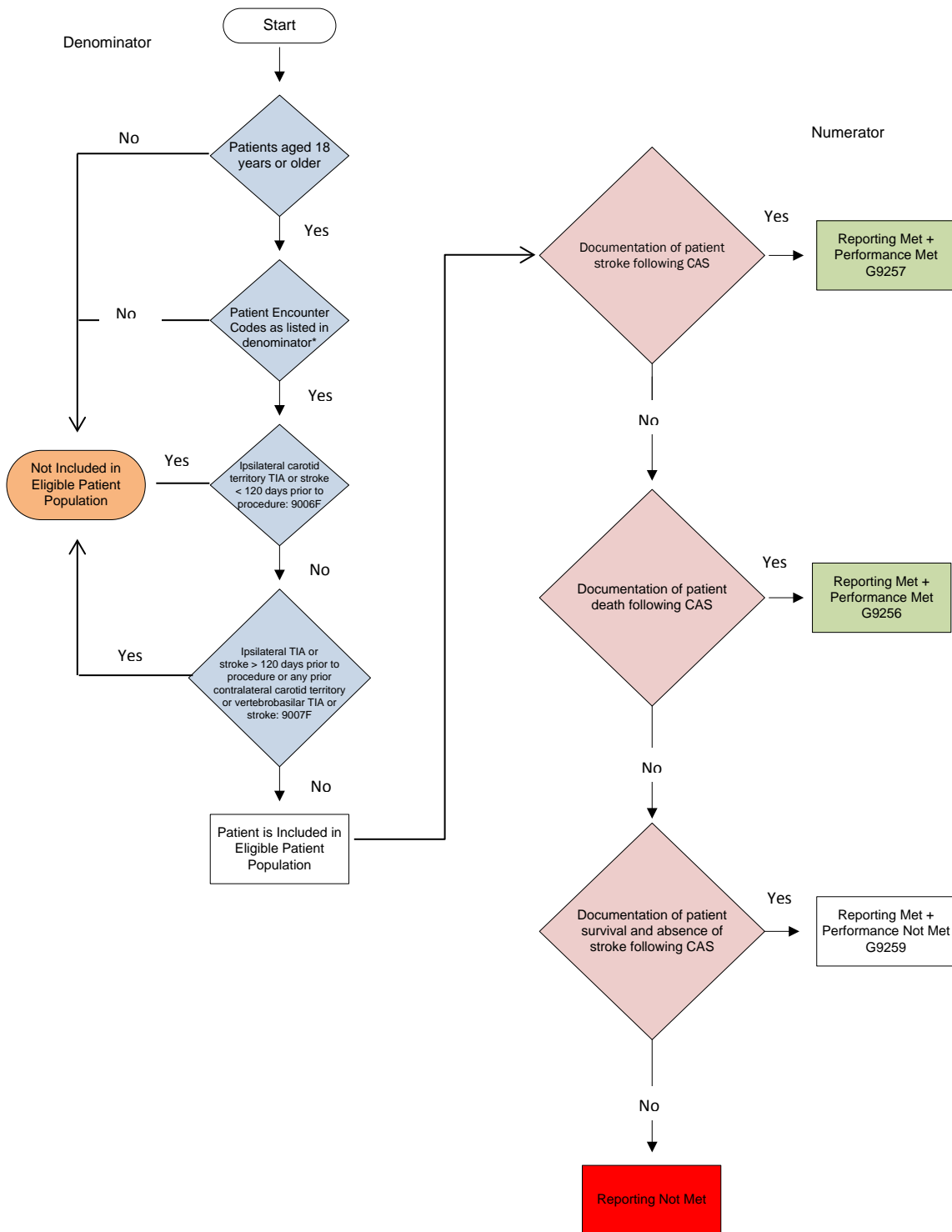
Surgeons performing CAS on asymptomatic patients must select patients at low risk for morbidity and perform the procedure with a very low complication rate in order to achieve benefit. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

Updated Society for Vascular Surgery guidelines for management of extracranial carotid disease. Ricotta et al, J Vasc Surg, 54:3, 2011

Neurologically asymptomatic patients with $\geq 60\%$ diameter stenosis should be considered for CAS for reduction of long-term risk of stroke, provided the patient has a 3- to 5-year life expectancy and perioperative stroke/death rates can be $\leq 3\%$ (GRADE 1, Level of Evidence A).

Data Source: Claims/Paper Medical Record, Registry
Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
Number of Multiple Performance Rates: Not applicable
Inverse Measure: Yes
Proportion Measure Scoring: Yes
Continuous Measure Scoring: No
Risk Adjustment: No

Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Artery Stenting (CAS)



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title

ASA #29: Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Endarterectomy (CEA)

Measure Description

Percentage of asymptomatic patients aged 18 years and older undergoing CEA who experience stroke or death following surgery while in the hospital.

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time a CEA is performed during the reporting period. It is anticipated that clinicians who provide services of CEA, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, CPT Category II codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure. The measure must capture both the surgical and related anesthesia code. There are no allowable performance exclusions for this measure.

Denominator

All patients, aged 18 years or older, who are asymptomatic undergoing CEA

Denominator Criteria (Eligible Cases):

All patients aged 18 years or older on date of encounter

AND

Patient encounter during the reporting period (CPT): 35301

AND

CPT I 00350

AND NOT

Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure: **9006F**

OR

Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke: **9007F**

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who experience stroke or death in the hospital following CEA

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met: Documentation of patient stroke following CEA (G9258)

OR

Performance Met: Documentation of patient death following CEA (G9260)

OR

Performance Not Met: Documentation of patient survival and absence of stroke following CEA (G9261)

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Surgeons performing CEA on asymptomatic patients must select patients at low risk for morbidity and perform the procedure with a very low complication rate in order to achieve benefit. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

Updated Society for Vascular Surgery guidelines for management of extracranial carotid disease. Ricotta et al, JVasc Surg, 54:3, 2011

Neurologically asymptomatic patients with $\geq 60\%$ diameter stenosis should be considered for CEA for reduction of long-term risk of stroke, provided the patient has a 3- to 5-year life expectancy and perioperative stroke/death rates can be $\leq 3\%$ (GRADE 1, Level of Evidence A).

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

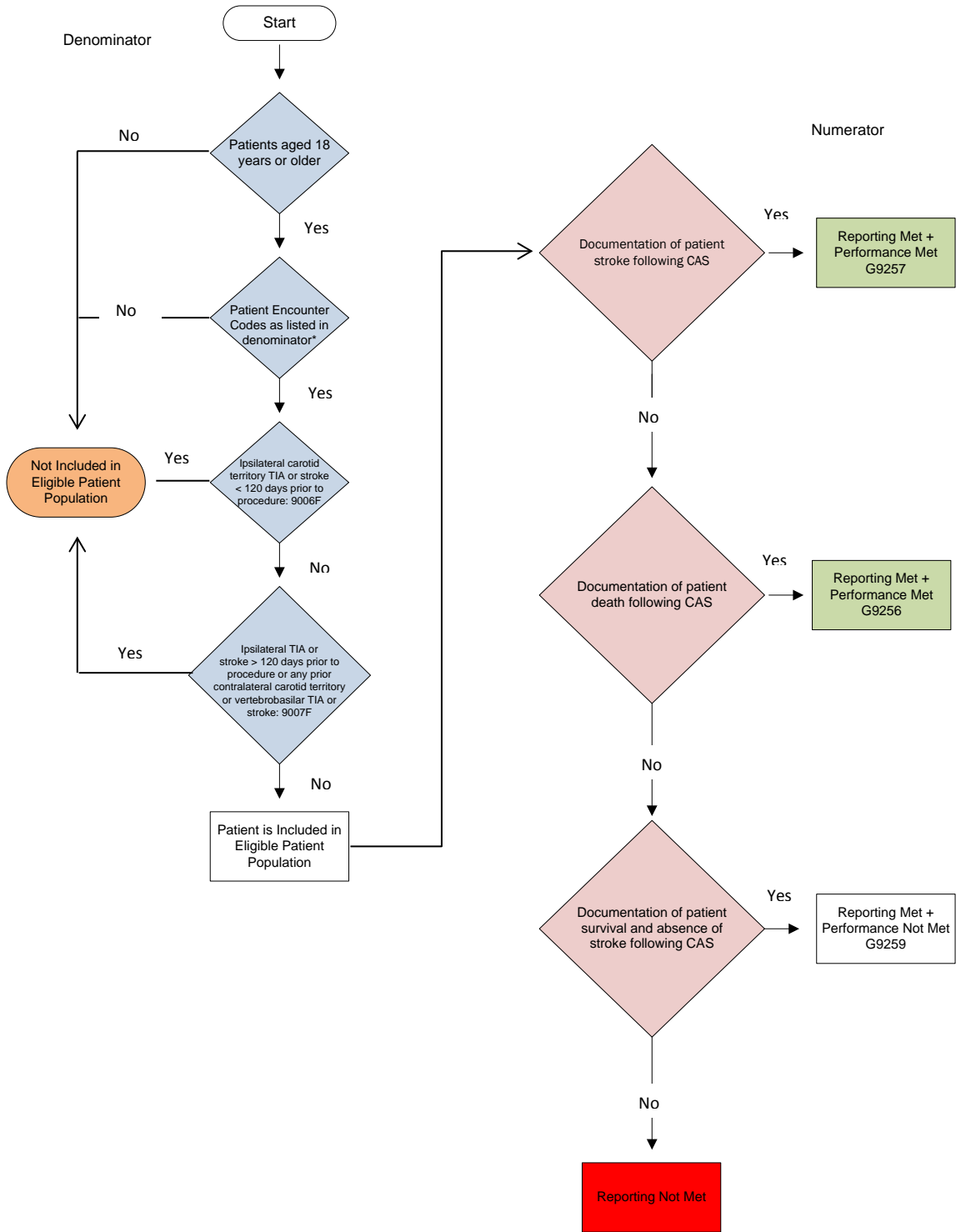
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Rate of Post-operative stroke or death in asymptomatic patients undergoing Carotid Endarterectomy (CEA)



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title

ASA #30: Rate of Endovascular aneurysm repair (EVAR) of small or moderate non-ruptured abdominal aortic aneurysms (AAA) who die while in the hospital

Measure Description

Percentage of patients aged 18 years or older undergoing endovascular repair of small or moderate abdominal aortic aneurysms (AAA) who die while in the hospital.

NQS Domain

Effective Clinical Care

Instructions:

This measure is to be reported each time an EVAR is performed during the reporting period. It is anticipated that clinicians who provide services of EVAR, as described in the measure, based on the services provided and the measure-specific denominator coding will report this measure. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. A lower calculated performance rate for this measure indicates better clinical care or control.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes, CPT Category II codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-codes are used to report the numerator of the measure.

Denominator

Patients aged 18 or older with infrarenal non-ruptured endovascular AAA repairs

Denominator Criteria (Eligible Cases):

All patients aged 18 years or older on date of encounter

AND

Patient encounter during the reporting period (CPT): 34800, 34802

AND

CPT I 01926

AND NOT

For women:

Aortic aneurysm 5.5 - 5.9 cm maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: **9003F**

OR

Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: **9004F**

OR

For men:

Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: **9004F**

Denominator Exclusions / Exceptions

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who die in the hospital following endovascular AAA repair

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

Documentation of patient death in the hospital following endovascular AAA repair (**G9262**)

OR

Performance Not Met:

Documentation of patient survival in the hospital following endovascular AAA repair (**G9263**)

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Elective repair of a small or moderate sized AAA is a prophylactic procedure and the mortality/morbidity of the procedure must be contrasted with the risk of rupture over time. Surgeons should select patients for intervention who have a reasonable life expectancy and who do not have a high surgical risk.

The care of patients with an abdominal aortic aneurysm: The Society for Vascular Surgery practice guidelines. Chaikof et al, J Vasc Surg, 50:4, supplement, 2009.

Elective repair is recommended for patients that present with a fusiform AAA ≥ 5.5 cm in maximum diameter, in the absence of significant co-morbidities.

Surveillance is recommended for most patients with a fusiform AAA in the range of 4.0 cm to 5.4 cm in maximum diameter.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

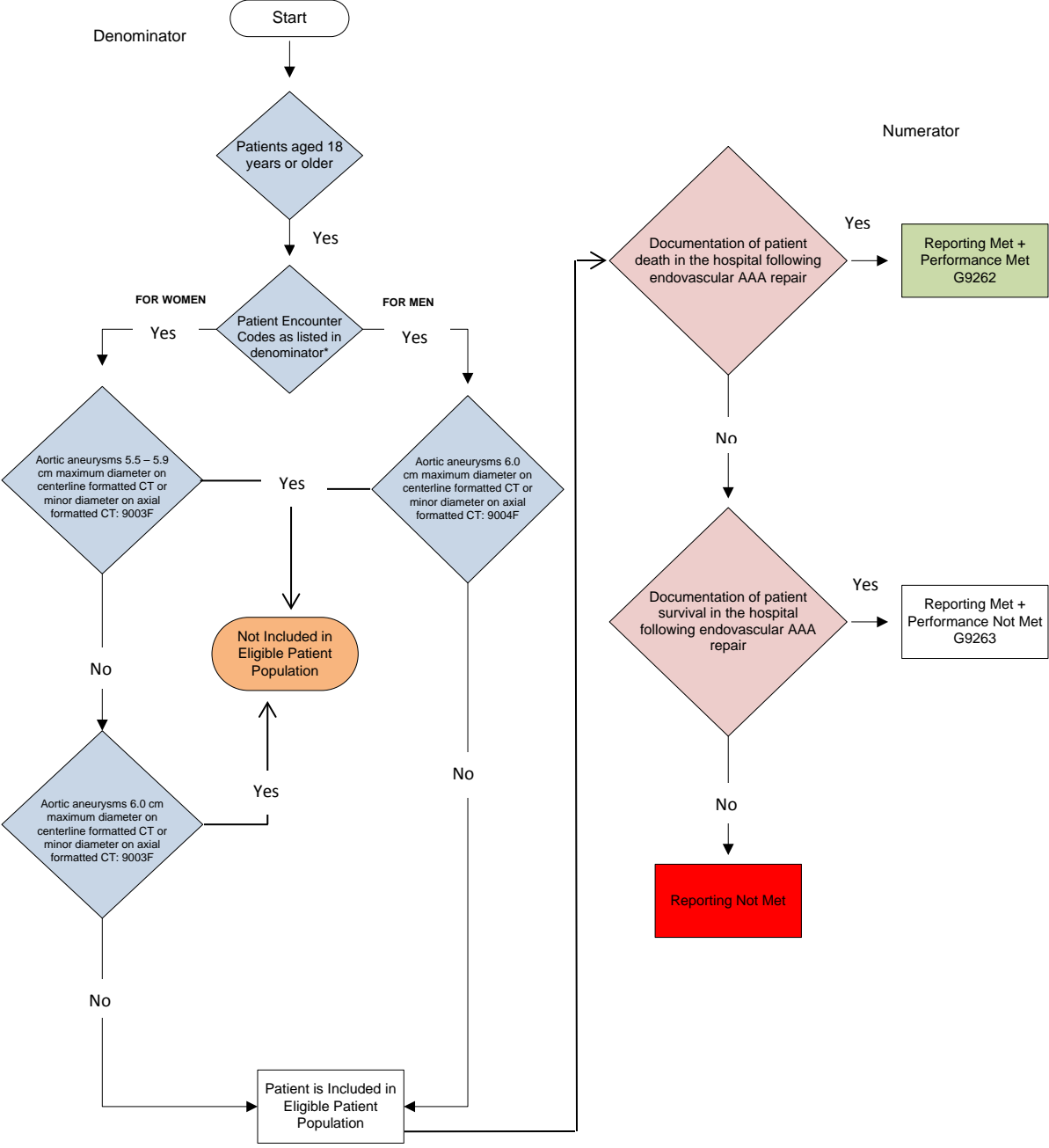
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Rate of Endovascular aneurysm repair (EVAR) of small or moderate non-ruptured abdominal aortic aneurysms (AAA) who die while in the hospital



***NOTE:** This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title

ASA #31: Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation

Measure Description

Percentage of patients regardless of age or gender undergoing a total knee replacement who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of Deep Vein Thrombosis, Pulmonary Embolism, Myocardial Infarction, Arrhythmia and Stroke).

NQS Domain

Patient Safety

Instructions

This measure is to be reported each time a patient undergoes a procedure listed in the denominator during the measurement period.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure’s denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure.

Denominator

Patients regardless of age or gender undergoing a total knee replacement

Denominator Criteria (Eligible Cases):

Patient encounter during the reporting period (CPT): 27438

AND

Patient encounter during the reporting period (CPT): 01392

OR

Patient encounter during the reporting period (CPT): 27442, 27446

AND

Patient encounter during the reporting period (CPT): 01400

OR

Patient encounter during the reporting period (CPT): 27447

AND

Patient encounter during the reporting period (CPT): 01402

Denominator Exclusions / Exceptions:

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of Deep Vein Thrombosis, Pulmonary Embolism, Myocardial Infarction, Arrhythmia and Stroke)

Numerator Options:

Performance Met: Patients who are evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of DVT, PE, MI, arrhythmia and stroke) **(G9298)**

OR

Performance Not Met: Patients who are not evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including (e.g. history of DVT, PE, MI, arrhythmia and stroke, reason not given) **(G9299)**

Measure Type: Process

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Prior to a total knee replacement the patient's venous thromboembolic and cardiovascular risk should be evaluated. A population-based study of all Olmstead County, Minnesota, patients undergoing a total hip or knee arthroplasty from 1994 - 2008, reported that patients undergoing a total knee arthroplasty with a previous history of a cardiac event or a thromboembolic event were associated with an increased risk of a 90-day cardiac or thromboembolic event following surgery. (Singh JA, Jensen MR, Harmsen WS, Gabriel SE, Lewallen DG, 2011)

A study using the Danish national resident registries compared all patients undergoing a primary THR and TKR from 1998 – 2007 to control groups not undergoing one of the procedures and found that the AMI rate 2 weeks after TKR was increased 31-fold compared to the control group. (Lalmohamed A, Vestergaard P, Klop C, Grove EL, 2012)

Any preoperative disease state should be identified and managed prior to surgery to minimize the risk of the surgical procedure.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the preoperative period.

ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for the Noncardiac Surgery (Fleischer LA, Beckman JA, Brown KA, et al. ACC/AHA, 2007)

In patients with known coronary artery disease (CAD) or the new onset of signs or symptoms suggestive of CAD, baseline cardiac assessment should be performed. In the asymptomatic patient, a more extensive assessment of history and physical is warranted in those individuals 50 years of age or older, because the evidence related to the determination of cardiac risk factors and derivation of a Revised Cardiac Risk Index occurred in this population. Preoperative cardiac evaluation must therefore be carefully tailored to the circumstances that have prompted the evaluation and to the nature of the surgical illness.

Data Source: Claims/Paper Medical Record, Registry

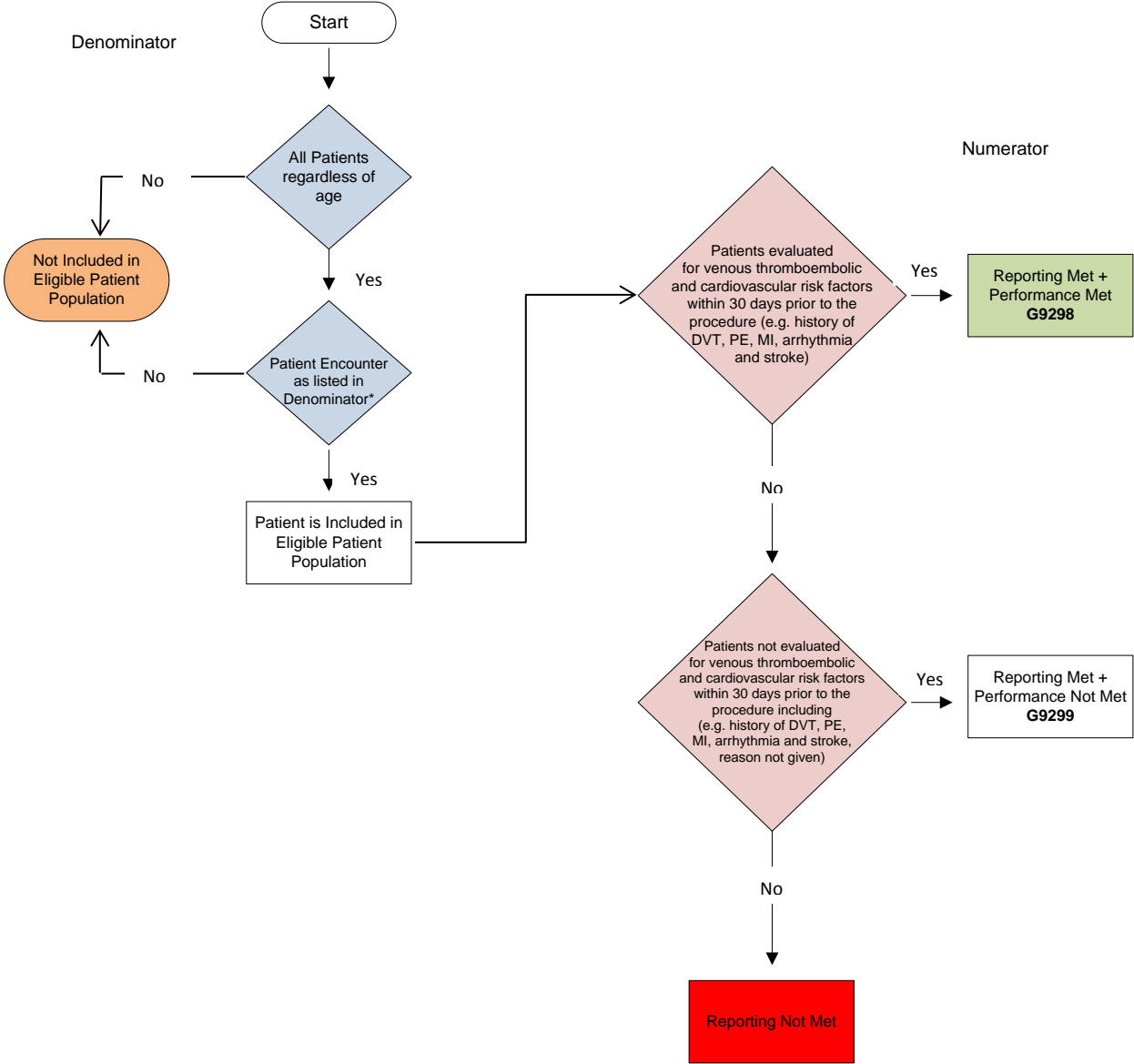
Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

Inverse Measure: No

Proportion Measure Scoring: Yes
Continuous Measure Scoring: No
Risk Adjustment: No

Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation



*NOTE: This measure requires that both the surgical and anesthesia CPT Codes be submitted for the denominator.

Measure Title**ASA #32: Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet****Measure Description**

Percentage of patients regardless of age or gender undergoing a total knee replacement who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet.

NQS Domain

Patient Safety

Instructions

This measure is to be reported each time a patient undergoes a procedure listed in the denominator during the measurement period.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The measure must capture both the surgical and related anesthesia code. G-Codes are used to report the numerator of the measure.

Denominator

Patients regardless of age or gender undergoing a total knee replacement

Denominator Criteria (Eligible Cases):

Patient encounter during the reporting period (CPT): 27438

AND

Patient encounter during the reporting period (CPT): 01392

OR

Patient encounter during the reporting period (CPT): 27442, 27446

AND

Patient encounter during the reporting period (CPT): 01400

OR

Patient encounter during the reporting period (CPT): 27447

AND

Patient encounter during the reporting period (CPT): 01402

Denominator Exclusions / Exceptions:

- Organ Donors as designated by ASA Physical Status 6

Numerator

Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet (tourniquet around the proximal thigh)

Numerator Options:**Performance Met:**

Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet (**G9301**)

OR

Medical Performance Exclusion:

Documentation of medical reason(s) for not completely infusing the prophylactic antibiotic prior to the inflation of the proximal tourniquet (e.g., a tourniquet was not used) (**G9300**)

OR

Performance Not Met:

Prophylactic antibiotic not completely infused prior to the inflation of the proximal tourniquet, reason not given (**G9302**)

Measure Type: Process
NQF Number: Not applicable
eCQM Number: Not applicable

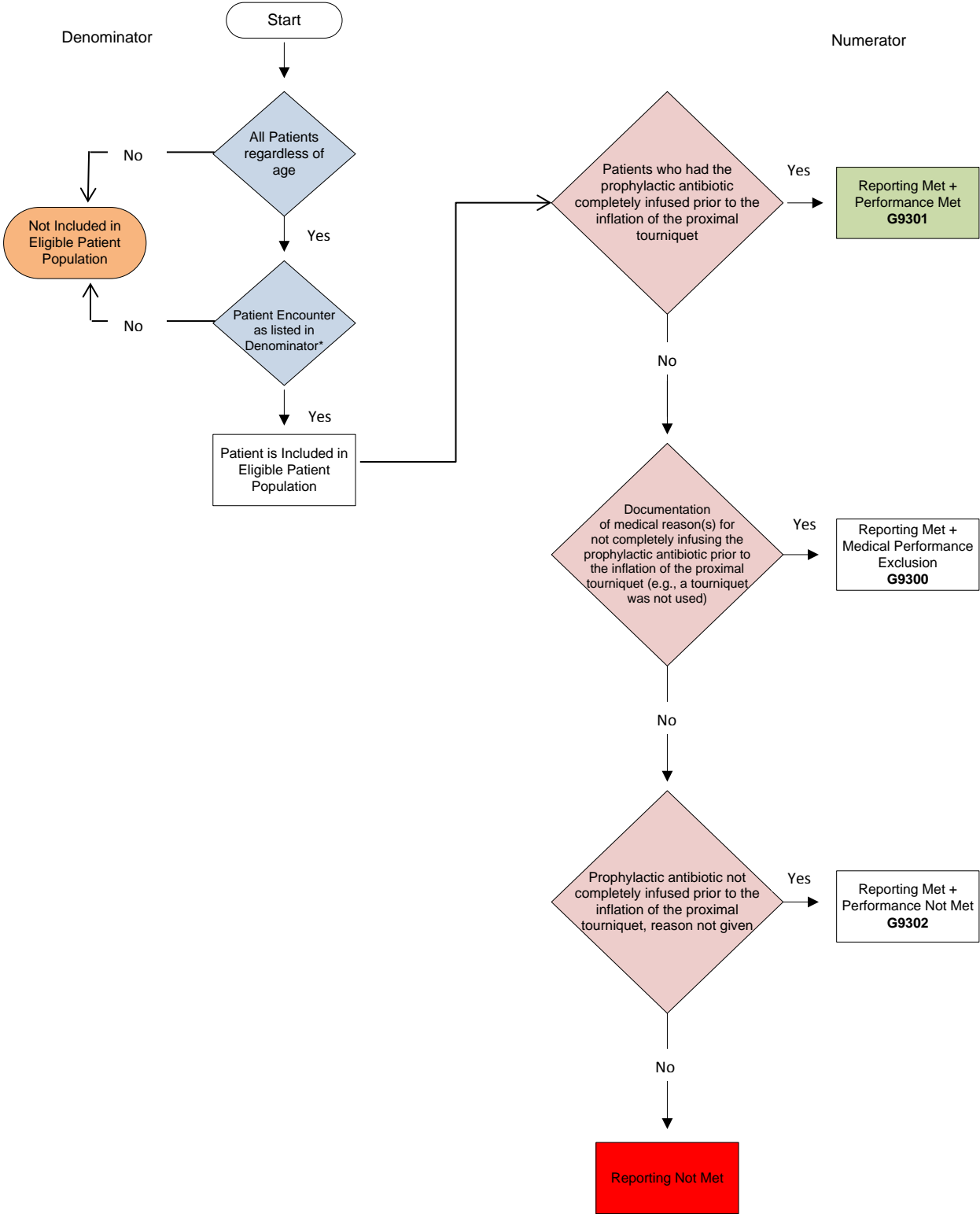
Rationale

The Surgical Care Improvement Project (SCIP) evaluates the timing and appropriateness of the prophylactic antibiotic. This measure evaluates that the prophylactic antibiotic is completely infused prior to the inflation of the tourniquet. This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the intraoperative period.

National Surgical Infection Prevention Project Advisory Statement 2004 (Bratzler DW, Houck PM, 2005)
If a proximal tourniquet is used, the antimicrobial should be completely infused before inflation.

Data Source: Claims/Paper Medical Record, Registry
Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)
Number of Multiple Performance Rates: Not applicable
Inverse Measure: No
Proportion Measure Scoring: Yes
Continuous Measure Scoring: No
Risk Adjustment: No

Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet



Measure Title

ASA #37: Unplanned Transfer or Admission to Hospital

Measure Description

Percentage of patients, regardless of age, scheduled for outpatient surgery with plans to be discharged the same day as surgery who have an unplanned hospital transfer or hospital admission within 48 hours of induction of anesthesia or start of monitored anesthesia care.

NQS Domain

Efficiency and Cost Reduction

Instructions

This measure is to be reported each time an elective outpatient surgical procedure to be performed under anesthesia during the reporting period. There is no diagnosis associated with this measure. It is anticipated that clinicians who provide the listed anesthesia services as specified in the denominator coding will submit this measure.

Measure Reporting

Patient demographics, registry codes and place of service indicators are used to identify patients who are included in the measure's denominator. Registry codes are used to report the numerator of the measure.

Denominator

All patients, regardless of age, who undergo an outpatient, elective surgical procedure, regardless of facility, under anesthesia who did not have a planned stay documented prior to procedure.

Definition:

A planned stay includes inpatient admission or observational stay.

Denominator Note: "Day of surgery" includes all patients in which the expected duration of services does not exceed 24 hours.

Denominator Criteria:

All patients, regardless of age

AND

Elective surgery: **G9643**

AND

Patient encounter during the reporting period (CPT):

Anesthesia codes which are commonly indicated for associated surgical procedure(s):

00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00561, 00562, 00563, 00566, 00567, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260,

01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01935, 01936, 01951, 01952, 01953, 01958, 01960, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

AND

Patient did **NOT** have a documented planned stay prior to procedure: **ASA37B**

AND

Patient did **NOT** have an inpatient or under observational status at time of encounter: **ASA37C**

Denominator Exceptions/Exclusions

- ASA Physical Status indicating case is emergent by using “E” designation or designated by code 99140

Numerator

Patients who have an unplanned hospital transfer or admission within 48 hours of an anesthesia service who were scheduled to be discharged from the facility on the same day as surgical procedure is performed.

Numerator Options:

Performance Met:

ASA37D

Patient who was scheduled to be discharged from the facility on the same day as surgical procedure was performed experienced an unplanned hospital transfer or admission within 48 hours of the anesthesia service

Performance Not Met:

ASA37E

Patient did not experience an unplanned hospital transfer or admission within 48 hours of the anesthesia service.

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Adverse events that result in an unplanned transfer or admission to the hospital may cause patients and their caregivers financial and social distress as well as significantly increase the cost of care. The need for hospital admission following ambulatory surgery may indicate a lack of appropriate risk stratification or suboptimal preoperative evaluation and testing. This represents a potentially preventable burden on hospital resources and healthcare system finances.

While it is not always possible to predict who will require hospital admission following ambulatory surgery, a high rate of admission may indicate poor quality care to include inadequate preoperative risk stratification and medical optimization. The goal for outpatient surgery should be zero hospital admissions. Any outpatient admission to a hospital should be captured and reviewed.

Although measures are available at the facility level, this measure looks specifically at those members of a patient's care team who provide anesthesia services. Multiple studies have been published on the effects of unplanned transfer or admission to a hospital. Studies include:

- Coley KC, Williams BA, DaPos SV, Chen C, Smith RB. Retrospective evaluation of unanticipated admissions and readmissions after same day surgery and associated costs. J Clin Anesth. 2002 Aug;14(5):349-53. PubMed External Web Site Policy
- Department of Health and Human Services, Office of Inspector General. Quality oversight of ambulatory surgical centers: holding state agencies and accreditors accountable. Supplemental report 2. Washington (DC): Department of Health and Human Services, Office of Inspector General; 2002 Feb.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

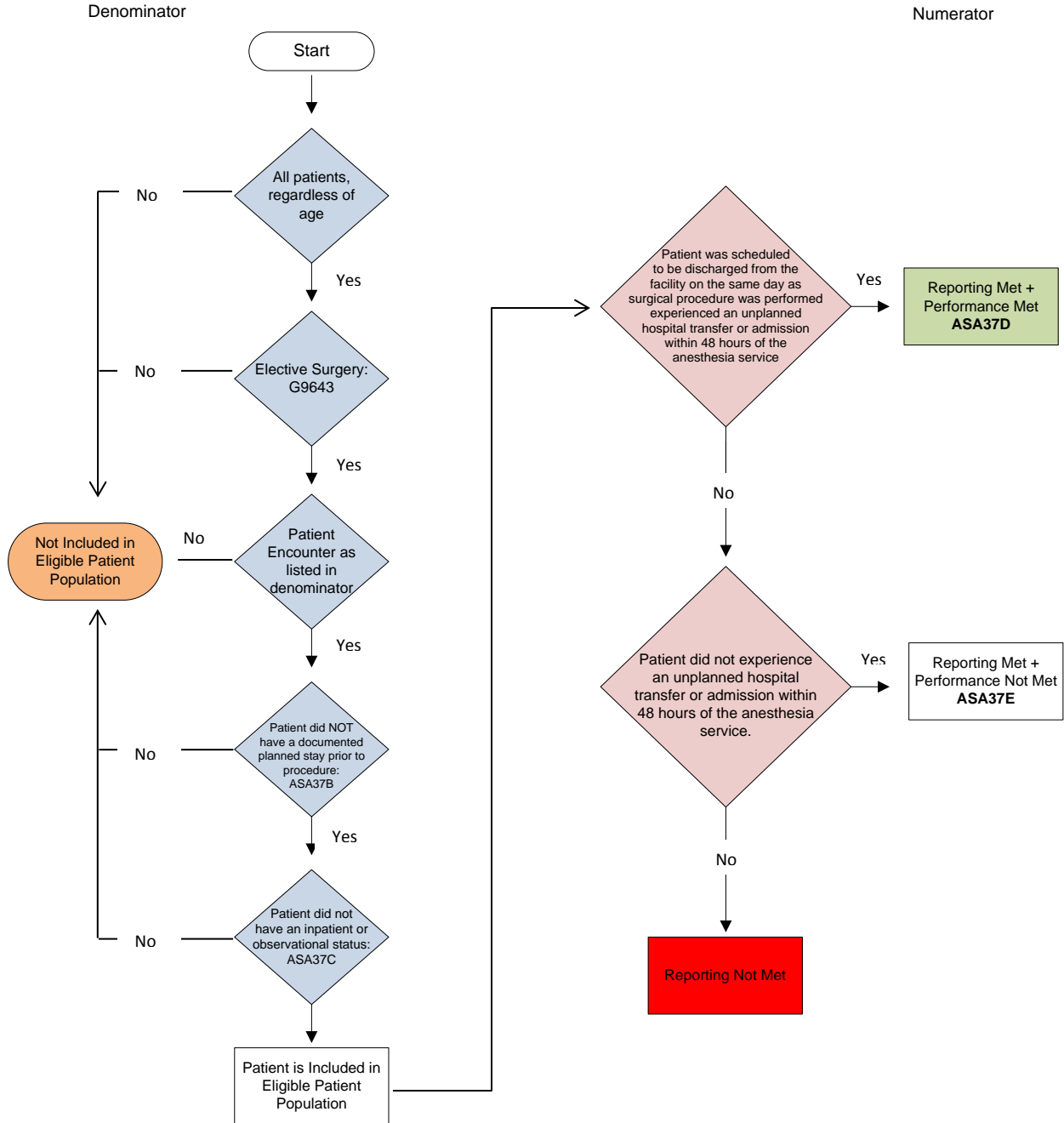
Inverse Measure: Yes

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

Unplanned Transfer or Admission to Hospital



Measure Title

ASA #38: New Corneal Injury Not Diagnosed in the Postanesthesia Care Unit/Recovery Area after Anesthesia Care

Measure Description

Percentage of patients, aged 18 years or older, who undergo anesthesia care and did not have a new diagnosis of corneal injury in the post-anesthesia care unit/recovery area.

NQS Domain

Person and Caregiver-Centered Experience and Outcomes

Instructions:

This measure is to be reported each time a patient underwent a procedure* with anesthesia not involving patients with pre-existing eye trauma or those patients undergoing ophthalmologic surgery.

Measure Reporting via the Qualified Clinical Data Registry

CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. Registry codes are used to report the measure numerator.

Denominator

All patients, aged 18 and older, who undergo anesthesia care*, except those with pre-existing eye trauma or those patients undergoing ophthalmologic surgery.

* Anesthesia care includes general, regional and monitored anesthesia care.

Denominator Criteria (Eligible Cases):

Patients aged 18 years or older on date of encounter

AND

Patient encounter during the reporting period (CPT):

00100, 00102, 00104, 00120, 00124, 00126, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500, 00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00562, 00563, 00566, 00580, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01916, 01920, 01922, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01953, 01961, 01962, 01963, 01965, 01966, 01967, 01968, 01969, 01991, 01992

Denominator Exclusions / Exceptions

- Patients who undergo ophthalmologic surgery or patients with a diagnosis of either eye trauma or corneal injury before anesthesia care.
- Organ Donors as designated by ASA Physical Status 6

Denominator Note: Measure not applicable to anesthesia care described by code 00300 when the underlying surgical procedure is described by CPT Codes: 67800, 67801, 67805, 67808, 67810, 67840, 67850, 67875, 67900, or 67938.

Numerator

All patients who undergo anesthesia care and who do not have a new diagnosis of corneal injury in the post-anesthesia care unit/recovery area.

Definition:

Corneal Injury: Includes both exposure keratitis and corneal abrasion. For the purposes of this measure, the distinction does not need to be made with fluorescein examination of the cornea under ultraviolet light; however, it can be diagnosed in this manner. Corneal injury also includes any new symptom of eye pain treated with topical antibiotic (e.g., erythromycin) while in the post-anesthesia care unit/recovery area. Other causes of eye pain (e.g. acute angle-closure glaucoma) can be excluded by instilling one drop of local anesthetic (e.g., proparacaine) into the eye. If the pain is immediately and completely relieved, corneal injury is confirmed and acute angle-closure glaucoma is excluded.

Numerator Quality-Data Coding Options for Reporting Satisfactorily

Performance Met:

ASA38A: Patient was NOT newly diagnosed with exposure keratitis or corneal abrasion in the postanesthesia care unit or recovery room.

OR

Performance Not Met:

ASA38B: Patient diagnosed with new exposure keratitis or corneal abrasion in the postanesthesia care unit or recovery room.

Measure Type: Outcome

NQF Number: Not applicable

eCQM Number: Not applicable

Rationale

Corneal abrasion/injury is the most common ophthalmologic complication that occurs during general anesthesia for non-ocular surgery. These injuries are usually just painful for the patient, but can lead to significant microbial keratitis with possibility of permanent scarring. There is no standardized method for protecting the eyes during an anesthetic for non-ocular surgery. Adhesive tape, individual single, sterile packaged eye covers, small bio-occlusive dressings, used with or without eye ointment are some of the options used. Some practitioners may simply observe closed, non-taped eyes. The specific type of eye ointment also varies significantly. Some ointment is made with petrolatum, some is water soluble, with or without preservatives. If ointment is used, preservative-free eye ointment is preferred, because preservative can cause corneal epithelial sloughing and conjunctiva hyperemia. None of the methods described in the literature are entirely effective at preventing corneal injury and some are associated with unwanted side effects. It is important to know that petrolatum is flammable and should be avoided when cautery will be used near the face. Several large studies have demonstrated that applying these techniques while measuring performance can lead to significant improvements in patient care. Measuring the

incidence of corneal injury will give practices the data they need to assess performance, compare to national benchmarks, and if gaps are identified, undertake measures to improve eye protection for patients. The net result will be reduced corneal injuries and patient discomfort. All eye trauma cases and all eye surgery cases will be excluded from the measure. Reporting separately those procedures done on the face, including the ear, nose, and mandible, will serve as stratification allowing comparison of procedures which most anesthesiologists believe have a higher risk of corneal injury and which also remove the eyes from the direct control of the anesthesiologist.

Data Source: Claims/Paper Medical Record, Registry

Measure Steward: American Society of Anesthesiologists (ASA) / Anesthesia Quality Institute (AQI)

Number of Multiple Performance Rates: Not applicable

Inverse Measure: No

Proportion Measure Scoring: Yes

Continuous Measure Scoring: No

Risk Adjustment: No

New Corneal Injury Not Diagnosed in the Postanesthesia Care Unit/Recovery Area after Anesthesia Care

